8.0 PROCESSING LIMITS ON SPECIES OTHER THAN BSAI POLLOCK

Chapter 8 examines the impacts of limiting processing of GOA groundfish, BSAI crab, and BSAI non-pollock groundfish by processors eligible to participate in pollock cooperatives. The analysis examines the language in the AFA, analyzes the structure of the industry, and develops 10 specific options to implement processing limits, sometimes referred to as "processing sideboards". It then estimates limits based on the structure of the industry and options specified. Conclusions are drawn regarding the efficacy of the options in fulfilling the mandates of the AFA.

The AFA requires the Council to submit measures by July 1999 to "protect processors not eligible to participate in the directed pollock fishery from adverse effects as a result of this Act or fishery cooperatives in the directed pollock fishery." These processors are collectively referred to as "non-AFA processors." In the November 1998, December 1998, and February 1999 Council meetings, representatives of non-AFA processors expressed concern about spillover effects of the AFA, and offered several suggestions for mitigating those potential impacts.

Specific language about processing restrictions for the 20 AFA-eligible catcher processors is found in §211(b)(3) and §211(b)(4):

> (3) BERING SEA PROCESSING.—The catcher/processors eligible under paragraphs (1) through (20) of section 208(e) are hereby prohibited from—
>
> (A) processing any of the directed fishing allowances under paragraphs (1) or (3) of section 206(b); and
>
> (B) processing any species of crab harvested in the Bering Sea and Aleutian Islands Management Area.
>
> (4) GULF OF ALASKA.—The catcher/processors eligible under paragraphs (1) through (20) of section 208(e) are hereby prohibited from—
>
> (A) harvesting any fish in the Gulf of Alaska;
>
> (B) processing any groundfish harvested from the portion of the exclusive economic zone off Alaska known as Area 630 under the fishery management plan for Gulf of Alaska groundfish; or
>
> (C) processing any pollock in the Gulf of Alaska (other than as bycatch in non-pollock groundfish fisheries) or processing, in the aggregate, a total of more than 10 percent of the cod harvested from Areas 610, 620, and 640 of the Gulf of Alaska under the fishery management plan for Gulf of Alaska groundfish.

Section 211(c) includes specific language discussing processing limits for BSAI crab for AFA-eligible motherships and inshore processors:

> (2) BERING SEA CRAB AND GROUNDFISH.
>
> (A) Effective January 1, 2000, the owners of the motherships eligible under section 208(d) and the shoreside processors eligible under section 208(f) that receive pollock from the directed pollock fishery under a fishery cooperative are hereby prohibited from processing, in the aggregate for each calendar year, more than the percentage of the total catch of each species of crab in directed fisheries under the jurisdiction of the North Pacific Council than facilities operated by such owners processed of each such species in the aggregate, on average, in 1995, 1996, 1997. For the purposes of this subparagraph, the term "facilities" means any processing plant, catcher/processor, mothership, floating processor, or any other operation

that processes fish. Any entity in which 10 percent or more of the interest is owned or controlled by another individual or entity shall be considered to be the same entity as the other individual or entity for the purposes of this subparagraph.

Other sections of the AFA provide additional directives to the Council, paraphrased below:

1. The Council cannot alter the list of eligible processors, unless the TAC increases or an eligible plant is lost.
2. By July 1999 the Council must recommend measures to "protect processors not eligible to participate in the (BSAI) directed pollock fishery from adverse effects of the AFA or fishery cooperatives...".
3. The Council must have in place by January 2000 measures to prevent AFA motherships and shoreside processors from processing, in aggregate, a greater percentage of the total catch of BSAI crab than they processed in 1995-1997 (on average).
4. The Council must submit measures to establish excessive share caps for harvesting and processing of all groundfish and crab in the BSAI, though under no time certain.
5. The Council can develop any other measures it deems necessary (at any time) to protect other fisheries and participants under its jurisdiction from adverse impacts caused by the AFA or co-ops in the directed pollock fishery.

Non-AFA processors have testified to the Council that their basic concern is that AFA processors will have a competitive advantage that may allow them to use economic and operational leverage to increase their positions in processing other species. In effect resources normally spent ensuring AFA processors their share of the BSAI pollock fishery, may now be freed up to gain processing shares of other fisheries.

In response the Council has chosen to include the concept of AFA processing limits for all groundfish in the GOA, all groundfish other than pollock in the BSAI, and all crab in the BSAI. The limits would apply to all AFA processors and would be based on the processing shares of AFA processors during the years 1995, 1996, and 1997, or alternatively just 1996 and 1997.

There are three levels at which processing limits could be applied for each species:

1. Single overall limit for all AFA-eligible processors
2. Sector limits: Onshore, Mothership and Catcher processors
3. Individual limits

Within each level there are at least three layers of facilities that could be included and thus restricted by the limits:

1. All plants and vessels that are AFA-eligible
2. All facilities owned by companies that own AFA-eligible plants and vessels
3. All facilities associated with entities that combine facilities through a 10 percent ownership link.[1]

[1]For purposes of this analysis, this language of §211(c)(2)(B) defining entities is called "the 10% Ownership Rule". The 10% Ownership Rule will be applied as follows:

> If a company has a 10 percent or more ownership stake in an AFA-eligible processing facility, then all other processing facilities in which that company has a 10 percent ownership will also be considered part of the AFA-entity. For purposes of the analysis, the lease of a facility will be considered ownership of that facility.

The nine permutations of the above levels and layers are analyzed as options along with one additional option, which would apply individual company processing limits, but would include only AFA-eligible facilities within those companies.

The analysis first considers the perspectives of both non-AFA processors and AFA processors and of economic theory. Next, the analysis provides an overview of the structure and ownership of the groundfish processing industry. The analysis then focuses on specific options for processing limits. Decision points are identified that the Council will need to address in developing its preferred alternative. Embedded in the list of decision points is the question of how the processing limits should be applied, with specific definitions for the 10 options referred to in the previous paragraph. Following the list of decision points, the analysis examines each of the 10 options with implementation steps, tables showing the specific processing limits, and an assessment of impacts for each. The final section of the chapter summarizes the processing limit options and presents conclusions regarding their feasibility.

8.1 Perspectives on the Need and Objectives for Processing Limits

8.1.1 Perspectives of Non-AFA Processors

Processors that have not participated in the BSAI pollock fisheries in the past will not be allowed to participate in cooperatives for BSAI pollock. They believe that participants in cooperatives will be able to leverage the relative certainty of cash flows in the BSAI pollock fisheries to obtain a competitive advantage in non-pollock fisheries, and thus increase their processing share of non-pollock fisheries. Here is a summary of views expressed by non-AFA processors:

- Inshore processors will move from 36 percent of the total pollock TAC under inshore-offshore allocations approved by the NPFMC in 1998 to 45 percent of the total under AFA. This increase alone has the potential to increase revenue and profits for AFA inshore processors relative to non-AFA processors.
- AFA processors operating in cooperatives will be relatively certain of taking deliveries of a fixed amount of pollock, regardless of unforeseen events such as processing plant breakdowns or adverse weather conditions.
- Because of their relatively certain flows of pollock, AFA processors operating with cooperatives will be able to pace their pollock processing to take advantage of market conditions and processing technologies that will allow them to enhance recovery rates and revenues.
- With higher revenues and profits from pollock, AFA processors will have more of their own profits that could be invested in machinery and facilities that can take advantage of non-pollock fisheries.
- Higher profits and more certain cash flows from pollock will enable AFA processors to offer higher prices to catcher vessels for delivery of non-pollock species.
- The relative certainty of cash flow and potentially higher profits of AFA processors make it more likely that AFA processors will be able to raise new capital, either through new equity investment by external sources or through institutional lenders.
- To limit the ability of AFA processors to expand their share of other crab and non-pollock groundfish in the BSAI and all groundfish in the GOA, AFA processors should be restricted to processing amounts of these species that do not exceed amounts they have processed in the past.
- It is not enough to simply limit non-pollock processing by facilities that will be allowed to participate in cooperatives. Companies that own these facilities could easily evade the restrictions by expanding processing at their other facilities.

- It is also not enough to set processing limits on all facilities owned by AFA companies, because AFA companies could evade the restrictions by hiding their ownership of other non-pollock processing facilities under different company names. The restrictions on non-pollock processing must be applied to all companies in which AFA processors have a significant level of ownership or control.
- The appropriate level of ownership by which to measure AFA affiliation is 10 percent. Ownership levels less than 10 percent do not indicate significant ownership or control.

8.1.2 Perspectives of AFA Processors

AFA processors express the view that:

- Declines in the overall pollock TAC have eroded the profitability of existing investments in pollock processing equipment and pollock processing facilities.
- Restrictions placed on the pollock fisheries to protect the habitat of Steller sea lions further reduce the ability of pollock processors to profitably utilize their existing equipment and facilities.
- Several owners of AFA-eligible facilities, in an effort to diversify their interests, have made significant investments in non-pollock processing lines, plants, and vessels in recent years. Some came on line in 1998 before the AFA. Under the proposed limits much of the potential earning power of these investments would be eroded.
- Other owners of AFA-eligible facilities, particularly those that may have an interest in selling their facilities, have expressed the concern that the processing limits, as proposed, severely restrict the market value of their pollock processing plants. This concern stems from the language in the act that would include all facilities that are related to AFA processors by minor amounts of common ownership under the processing restriction. Owners interested in selling their facilities, perhaps to CDQ groups, are concerned that a literal interpretation of the AFA would mean that if a CDQ organization, for example, purchased an AFA processing facility, all other processing facilities in which the CDQ organization has an interest would be limited by the processing restriction. Restrictions would be imposed even though there may be no direct link between the organization's pollock interests and its non-pollock interests.
- Without the ability to operate with pollock cooperatives, the value of existing pollock investments would continue to decline and pollock processors would be susceptible to takeover by the very firms that are calling for AFA processing limits.
- Even with the ability to operate with pollock cooperatives, at least one large AFA processing entity is available for sale, indicating that future profitability of AFA processors may be lower than other opportunities outside the fish processing industry.
- Given these considerations, pollock processors believe the AFA is necessary to ensure the continued viability of the pollock processing industry, and does not merit the imposition of punitive restrictions.

8.1.3 Perspectives of Non-AFA Processors Who May Be Harmed By Processing Limits

The language in §211(c)(2)(A) regarding the 10 percent ownership linkage is of considerable concern to processors that are not directly involved in the pollock fishery, but which may be linked to AFA processors by this rule. The language is also a concern of CDQ organizations that are actively looking for investments in pollock processing facilities. Many CDQ organizations have already made investments in other non-pollock processing facilities. If the language in the 10% Ownership Rule is used in the context of processing limits, then many non-pollock processors will be restricted even though they have no direct pollock processing interests.

8.1.4 Perspectives of Economic Theory

Economic theory indicates that the formation of cooperatives will lead to more efficient utilization of the resources used in the pollock production process. Most investments in pollock processing capacity were made assuming a race for fish would exist throughout the expected life cycle of the investment. Cooperatives help eliminate the race for fish and allow pollock processors to utilize resources more efficiently and generate higher profits.

Though the existence of higher-than-expected profits generally induces additional investment in the form of new entrants, the AFA prohibits new entry into the pollock processing industry. Therefore additional investments in processing will be linked to existing processors and most likely be made to take advantage of the extra time allowed for processing that is achieved by the cooperative system. Or, excess profits might be made by these firms, without expanding pollock capacity. In an industry widely characterized as have substantial "excess processing capacity," it seems probable that, at least in the short- and intermediate-run, the latter pattern will emerge among pollock processors, rather that the former.

In any case, at some point, additional investments in pollock processing may generate lower returns than would be generated by additional investments to process other species. In addition, pollock processors may find it more profitable to shift the timing of their pollock operations so that their existing facilities can be used for processing of other species. Therefore, at some point it is likely that AFA processors, if unconstrained, will invest additional capital and time into the processing of species other than pollock. This underscores the primary concern of proponents of processing limits for AFA processors.

8.1.5 Effect of Design of Processing Limits

Impacts of non-pollock processing limits will vary depending on how they are configured. In general the limits will create two classes of processors for every species, with potentially very different impacts on each. For species other than pollock in the BSAI the two processor classes will be:

1. Non-AFA processors, which in aggregate will be guaranteed a minimum percentage of the processing of all crab and groundfish species other than BSAI pollock
2. AFA processors, which in aggregate will be limited to a maximum percentage, but not guaranteed that percentage, of the processing of all crab and groundfish species other than BSAI pollock

For non-AFA processors the limits may ease competition from AFA processors for species other than pollock in the BSAI, and in the short run, lead to increased profits. However, the unexpected profits will likely inspire additional investment, either from within the class or from new entries into the processing business, the latter being particularly important because, unlike AFA processors, entry in the non-AFA class is not restricted. New entrants will erode the profitability of existing plants until no further "excess profits" are being made in this sector.

For AFA processors the limits on processing do not represent a guaranteed percentage of the processing of a given species. AFA processors will face the prospect of being forced to end processing because of other AFA processors, but must also worry that non-AFA processors will increase their capacity and process at levels above their guaranteed minimums. Thus it appears that the processing limits may lead to increased price competition for fish other than pollock in the AFA processing class, and increase investments that accelerate processing, but do little to add value per unit of fish. The effect of intensified price competition would likely reduce net revenues for BSAI pollock processors, however, increased ex-vessel prices would benefit catcher

vessels. It is not possible to determine if ex-vessels prices would rise under this management scenario. If they did rise, they would only increase to a point that reflects their competitive value, in the long run.

Processing limits may also have unintended consequences which result primarily from the fact that ownership interests in the crab and groundfish processing industry are very intertwined. It is often very difficult to distinguish between one company and another in terms of ownership. Many of the owners of AFA-eligible facilities have interests in other facilities that are not AFA-eligible. Similarly, many owners of facilities that are not AFA-eligible have ownership stakes in AFA-eligible facilities. Therefore, it is very likely that AFA processors will be either too narrowly defined to effectively limit AFA processors, or too broadly defined, which will impose limits on companies that may have little or no interest in pollock processing.

8.1.6 Objectives and Effectiveness of Processing Limits

From the preceding discussion it is clear that the concept of processing limits will be controversial. To provide a consistent framework for qualitatively judging the effectiveness of the different options, this section develops a set of ten objectives based on the perspectives of the four groups directly affected.

From the perspective of non-AFA processors, processing limits should be imposed to prevent AFA processors from increasing their historical share of the processing of non-pollock species as a result of their ability to form cooperatives in the BSAI pollock fisheries. This perspective may be translated into three objectives:

Objective 1: Processing limits should limit AFA processing of non-pollock species to levels achieved before AFA.

Objective 2: Processing limits should include all processing interests of AFA companies.

Objective 3: Processing limits should prevent AFA companies from evading the limits through subsidiaries or holding companies.

If processing limits must be imposed under AFA, then AFA processors' perspectives lead to the following three objectives:

Objective 4: Processing limits should allow AFA processors to maximize their ability to realize profits in the pollock processing industry.

Objective 5: Processing limits should allow AFA processors to utilize non-pollock processing capacity improvements completed before AFA.

Objective 6: Processing limits should not limit the market value of their AFA-eligible facilities.

In addition, non-pollock processors indirectly linked to AFA processors are likely to view the AFA processing limits with the following objective:

Objective 7: Processing limits should not restrict non-pollock processors that will not benefit directly from the AFA.

Finally, NMFS will have certain objectives relating to its ability to implement the limits and to reduce the expense of implementation, monitoring, and enforcement, such as the following :

Objective 8: Processing limits should not substantially increase paperwork requirements on processors.

Objective 9: Processing limits should be easy and inexpensive to set annually.

Objective 10: Processing limits should be easy and inexpensive to monitor and enforce.

The ten objectives are used to evaluate qualitatively the processing limits.

8.2 Structure of the Pollock Processing Industry as it Relates to Processing Limits

As noted earlier, ownership of crab and groundfish processors is very intertwined. Thus specification of processors will be critically important in determining the impacts of processors limits. This section examines the structure of the pollock processing industry and discusses how ownership may be defined in terms of the processing limits. It examines ownership of each of the AFA-eligible facilities and other facilities that may be related through ownership.

8.2.1 The 10% Ownership Rule

The AFA defines ownership linkages as follows: "Any entity in which 10 percent or more of the interest is owned or controlled by another individual or entity shall be considered to be the same entity as the other individual or entity for the purposes of this subparagraph." Entities that are linked by this “10% Ownership Rule” to AFA-eligible processing facilities are referred to as AFA entities.

The 10% Ownership Rule is applied in this analysis as follows:

> If a company has a 10 percent or more ownership stake in an AFA-eligible processing facility, then all other processing facilities in which that company has at least 10 percent ownership will also be considered part of the AFA entity. In the analysis, lease of a facility is considered the same as ownership.

In identifying AFA entities and linkages, the Council needs to be aware that verifiably accurate and complete ownership information is not currently available from any source. Therefore, only approximate levels can be identified for applying processing limits.

Federal and state processing permits provide initial data for tracking owners. Additional information comes from public licensing documents required by states in which companies do business. In addition, less formal information is available, such as trade journals or publications such as *Fishing Vessels of the United States,* which lists vessel owners and management companies. Finally, information on ownership may be obtained directly from company officials. By combining information from different sources it is possible to determine ownership levels as a first-order approximation of AFA entities and linkages. Actual implementation and monitoring will depend upon more accurate and complete information on ownership. Presumably, NMFS or MARAD will require full disclosure of ownership information to determine and monitor processing limits.

8.2.1.1 CDQ Organizations

CDQ organizations and companies are treated no differently from non-CDQ companies for purposes of defining AFA entities. Thus if a CDQ company has an ownership stake of 10 percent or more in an AFA-eligible processing facility, then all other processing facilities in which the CDQ company has at least 10 percent ownership also are considered part of the AFA entity.

8.2.1.2 Catcher Vessels

The 10% Ownership Rule is applied only to links between processing facilities. Links between processors solely through ownership of a catcher vessel are not considered links in terms of the 10% Ownership Rule. For example, two individuals may own a group of 5 catcher vessels in a 50-50 partnership. One of the individuals owns an AFA-eligible pollock processing facility, and the other owns a crab processing plant. Both facilities receive all of their deliveries from the 5 catcher vessels. Because the only link between the two companies is the catcher vessels, the two corporations are not considered part of a single AFA-entity. In its final decision the Council can change this interpretation.

8.2.1.3 Control

In providing the basis for the 10% Ownership Rule, the AFA includes not only ownership, but also the concept of control. This analysis focuses on ownership rather than control for two primary reasons:

1. Control is very difficult to define and does not lend itself to quantifiable measures.

2. An ownership share of as low as 10 percent in a processing company may imply control of the company. By associating all companies linked by 10 percent (or more) ownership levels, it is likely that all persons that have a controlling interest in an AFA company are also included.

Control is not a focus of this analysis. However, if the Council wants to consider control more closely, it should be noted that there are various indicators of control. For example, percent of ownership is often equated to percent of control of an organization. Ownership information often is a matter of public record, but other influences and controls may not be evident. Such influence may be exerted through joint management or management links, personal or familial relationships, contractual obligations, and other means.

Officers of publicly held corporations often exert considerable influence or control, although they may not own a majority of the stock. Officers of privately held or closely held corporations may be somewhat more limited in their level of control, although they would be anticipated to have considerable influence on the corporation's activities. The analysis assumes that links between processors exist when a corporate officer of an AFA-eligible processor is a corporate officer or director for another processor, or when a corporate officer of an AFA-eligible processor has at least a 10 percent ownership in another processor.

Contractual obligations can also enable an individual or firm to exert control over a processor. For example, industry representatives discussed possible loans made to individuals or organizations by larger companies that require the individuals or organizations to sell all their harvest or product to the larger companies. Marketing agreements between firms may have similar requirements. Another example of possible control is a loan made to an individual to purchase a vessel with terms of the loan such that the lender actually controls the vessel. Although interviews mentioned these examples, no corroborating information could be found to support these statements. Therefore, influence or control through potential contractual terms and obligations are not treated as links in terms of the 10% Ownership Rule.

For many individuals, working in the fishing or processing industry offshore Alaska is a family tradition of several generations. Siblings and spouses are often active participants in the businesses and share in the business decisions. Long-standing friendships and family ties have also evolved over the years, and these relationships are often used to start or finance new vessels or expand the current business. The analysis conducted for this section identified instances in which owners, officers, and directors of AFA-eligible

processors had spouses and other family members with ownership positions in other processors. No other information could be found indicating that the individuals related to the AFA-eligible processors had substantive influence or control over the other processors. Subsequently, relationships between family members and friends are not treated as links in terms of the 10% Ownership Rule. In its final decision the Council will have the latitude to change this interpretation of the 10% Ownership Rule and include links between family members.

8.2.2 Basis for Ownership Patterns

The ownership of AFA-eligible processing plants and vessels is based on federal permit data from NMFS and intent-to-operate data from ADF&G, corporate license data from the states of Washington and Alaska, as well other data bases from private sources such as Dunn and Bradstreet. Corporate officers also have provided ownership details. Organizational charts are used to show ownership linkages. They include notes on sources of information.

There are shortcomings in most data bases. Some firms do not provide information to Dunn and Bradstreet, and the company record is limited to publicly available information. State of Washington corporate records list corporate officers and directors, but do not indicate percent of ownership by these persons, or ownership percentages for persons or firms that are not corporate officers or directors. State of Alaska corporate records typically show ownership percentages for officers and directors, but controlling interest in a corporation may be held by an entity or individual that is not an officer or director.

Discussions with corporate officers or owners typically provided the most detailed information. Attempts were made to verify this information through conversation with other industry members or through public records. In some instances individuals requested that their names not be attributed to certain details for their companies or other organizations, so names are not tied to specific information. Persons contacted are listed in Table 8.1.

8.2.3 AFA-Eligible Pollock Processing Plants and Vessels

Table 8.2 lists pollock processing plants and vessels that are AFA-eligible, the company owning the plant or vessel, and the sector in which the vessel or plant participates. This list is the basis for developing further linkages in the pollock processing industry.

Table 8.1 Persons Contacted

Name	Company
Mike Atterberry	Alaska Ocean Seafood LLP
Bill Atkinson	Alaska Frontier Company
Dave Benson	Tyson Seafoods Group (now Trident)
Alec Brindle	Wards Cove Packing
John Bundy	Glacier Fish Company
Doug Christensen	Arctic Storm, Inc.
Mike Coleman	Yak/Yok Holdings
Barry Collier	Peter Pan Seafoods, Inc.
Craig Cross	Alaska Trawl Fisheries, Inc.
Robert Czeisler	Phoenix Processor Limited Partnership
Matt Doherty	Ocean Peace, Inc.
Bart Eaton	Trident Seafoods, Inc.
Jessie Gharrett	NMFS
Jay Ginter	NMFS
Don Goodfellow	Westward Seafoods, Inc.
Glen Haight	Alaska Department of Community and Regional Affairs
John Henderschedt	YDFDA
Mike Hyde	American Seafoods Co.
John Iani	Unisea, Inc.
John Lepore	NMFS
Terry Leitzell	Northern Victor Partnership
Dave Little	Clipper Seafoods
Mariuz Mazurek	TCW/Oak Tree Capital Management
John Moeller	APICDA
Judy Nelson	BBEDC
Barry Ohai	Aleutian Spray Fisheries
Brent Paine	United Catcher Boats
Joe Plesha	Trident Seafoods, Inc.
Joe Sullivan	Mundt, MacGregor
Cory Swasand	Aleutian Spray Fisheries
Arne Thomson	Alaska Crab Coalition
Dick Tremaine	CBSFA
Doug Wells	Baranof Seafoods
John Winther	Ocean Prowler, LLC
Rob Wurm	Alaskan Leader Fisheries, LLP

Information from the industry discussions was added to the database, and searches on the names of companies, vessels, officers, and directors were conducted to identify links that were not known or had not been identified in discussions with corporate officers.

Table 8.2 AFA-Eligible Pollock Processing Plants and Vessels

Company	Vessel Name/ Plant Location	Sector
Alaska Ocean Seafood LLP	*Alaska Ocean*	CP
Alaska Trawl Fisheries, Inc.	*Endurance*	CP
Aleutian Spray Fisheries	*Starbound*	CP
Alyeska Seafoods, Inc.	Dutch Harbor	INS
American Seafoods Co.	*American Dynasty*	CP
American Seafoods Co.	*American Empress*	CP
American Seafoods Co.	*American Triumph*	CP
American Seafoods Co.	*Browns Point*	CP
American Seafoods Co.	*Christina Ann*	CP
American Seafoods Co.	*Elizabeth Ann*	CP
American Seafoods Co.	*Katie Ann*	CP
American Seafoods Co.	*Northern Eagle*	CP
American Seafoods Co.	*Northern Hawk*	CP
American Seafoods Co.	*Northern Jaeger*	CP
American Seafoods Co.	*Ocean Rover*	CP
American Seafoods Co.	*Pacific Explorer*	CP
American Seafoods Co.	*Pacific Navigator*	CP
American Seafoods Co.	*Pacific Scout*	CP
American Seafoods Co.	*Rebecca Ann*	CP
American Seafoods Co.	*Victoria Ann*	CP
Arctic Storm, Inc.	*Arctic Fjord*	CP
Arctic Storm, Inc.	*Arctic Storm*	CP
Northern Victor Partnership	*Northern Victor*	INS
Norton Sound EDC	*Northern Glacier*	CP
Norton Sound EDC	*Pacific Glacier*	CP
Peter Pan Seafoods, Inc.	King Cove	INS
Peter Pan Seafoods, Inc.	*Golden Alaska*	MS
Phoenix Processor Limited Partnership	*Ocean Phoenix*	MS
Supreme Alaska Seafoods	*Excellence*	MS
Trident Seafoods Corporation	Akutan	INS
Trident Seafoods Corporation	Sand Point	INS
Trident Seafoods Corporation (Tyson)	*American Enterprise*	CP
Trident Seafoods Corporation (Tyson)	*Island Enterprise*	CP
Trident Seafoods Corporation (Tyson)	*Kodiak Enterprise*	CP
Trident Seafoods Corporation (Tyson)	*Seattle Enterprise*	CP
Trident Seafoods Corporation (Tyson)	*U.S. Enterprise*	CP
Trident Seafoods Corporation (Tyson)	*Arctic Enterprise*	INS
Unisea Inc	Dutch Harbor	INS
Westward Seafoods Inc	Dutch Harbor	INS
Yak/Yok Holdings	*Highland Light*	CP

Sector definitions:

CP = Catcher processor

MS = Mothership

INS = Shore plant or inshore floating processor

Source: NFMS permit and blend data files, ADFG intent-to-operate files

8.2.4 Organization Charts for AFA-Entities

The organizational structure focuses on AFA entities as groups of firms or individuals with some common threads of ownership and control. The AFA entity can include individuals, companies, and other organizations. It even may consist of a parent organization that owns 100 percent of one or more companies that control AFA-eligible plants or vessels. In other instances, the AFA entity may consist of a parent organization with subsidiaries that control AFA-eligible plants or vessels. At the AFA entity level of aggregation, the definition of a company and the distinction between these two examples are not critical. However, if the Council wishes to pursue a company-oriented ownership rule, the definition of a company will be very important. For example, is a wholly owned company with separate management a distinct company from the parent company? Or if a parent organization owns 100 percent of the capital stock in two companies, each of which has a separate management structure to operate separate AFA-eligible facilities, are all three organizations separate companies? A company-oriented ownership rule will require a definition capable of addressing such distinctions, and this definition does not yet exist, since the Council has not yet acted on processor sideboards..

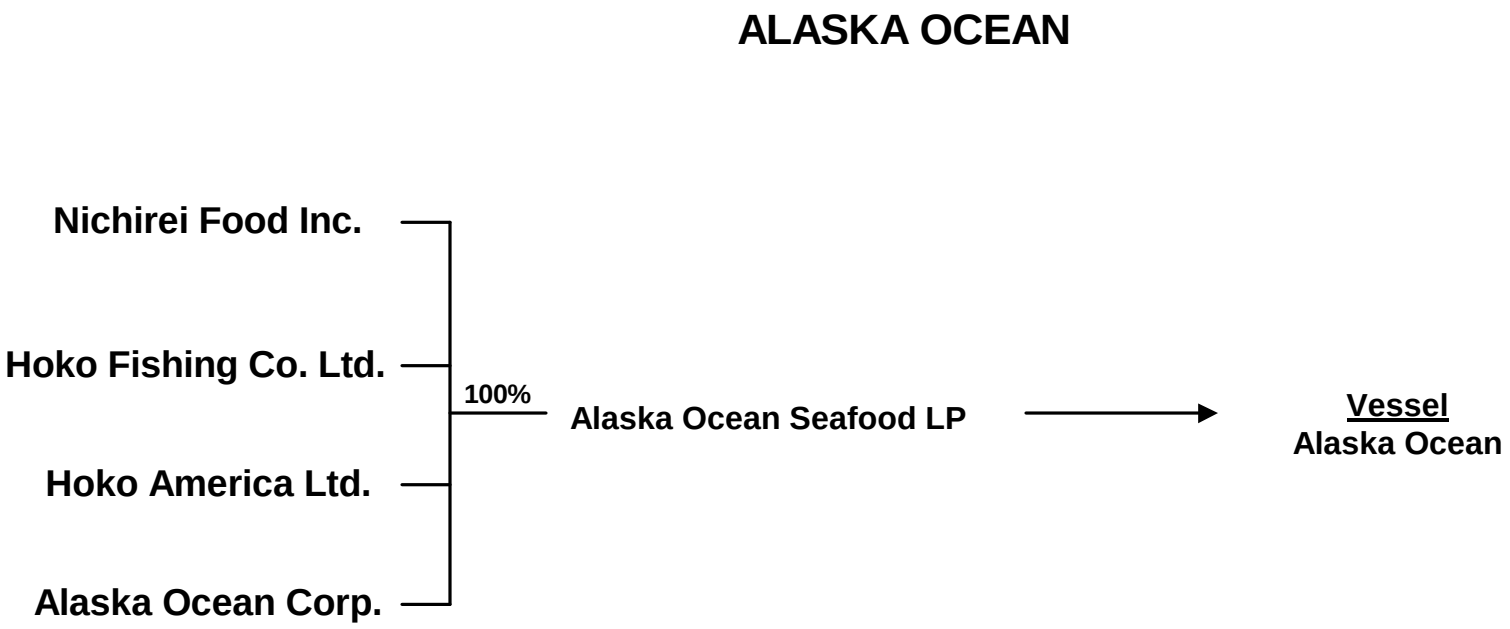
Figures 8.1 - 8.12 depict ownership or control linkages that exist for AFA-eligible processing plants and processing vessels, as well as linkages between the companies that own these plants and vessels. These links are presented at the entity level. Each overall structure is identified by the largest company or the firm with majority ownership in the others. The AFA entities described in this section include:

- Alaska Ocean
- Alaska Trawl
- Aleutian Spray
- American Seafoods
- Marubeni
- Maruha
- Nichiro Corporation
- Nippon Suisan Kaisha, Ltd.
- Trident Seafoods
- Tyson Seafoods Group, Inc.
- Unification Church
- Yardon Knot Holdings/Yardarm Knot Holdings

In addition to these entities, two CDQ groups (Bristol Bay Economic Development Corporation and Norton Sound Economic Development Corporation) have ownership interests in AFA-eligible processing facilities. Organization charts for these two entities are presented in Section 8.2.5 with information for all CDQ groups.

In the organizational charts, links that could be corroborated from several sources are shown with solid black lines. Links for which information could not be confirmed, or for which conflicting information was found, are shown with dashed lines. Information on these potential links is presented in notes for each chart.

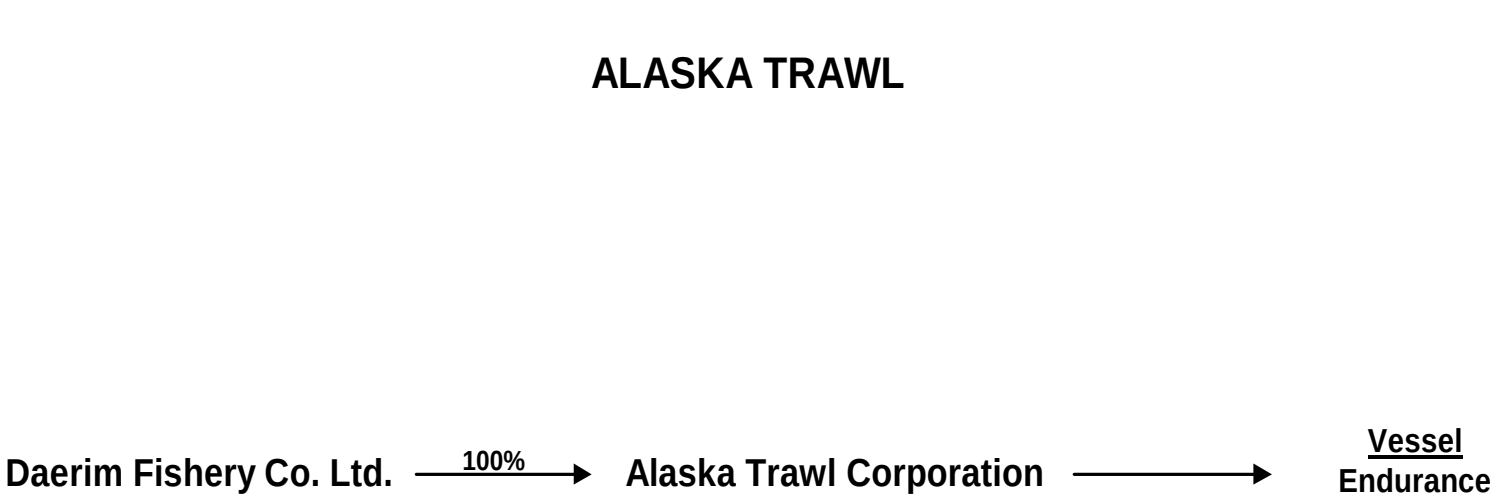
Figure 8.1 Organizational Chart for Alaska Ocean



Notes: Companies noted above are listed as partners in State of Washington Corporate records .

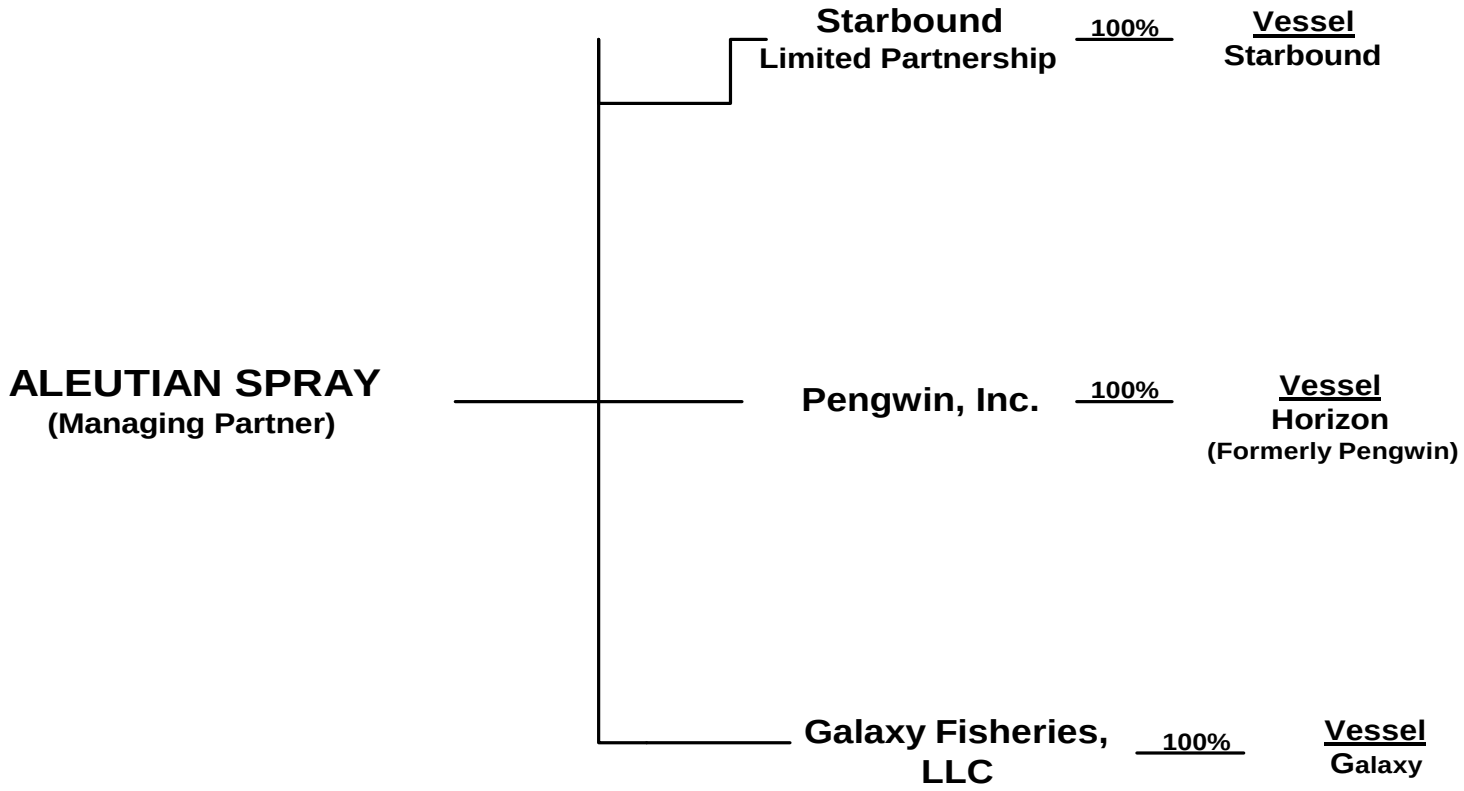
Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, In c.

Figure 8.2 Organizational Chart for Alaska Trawl



Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.

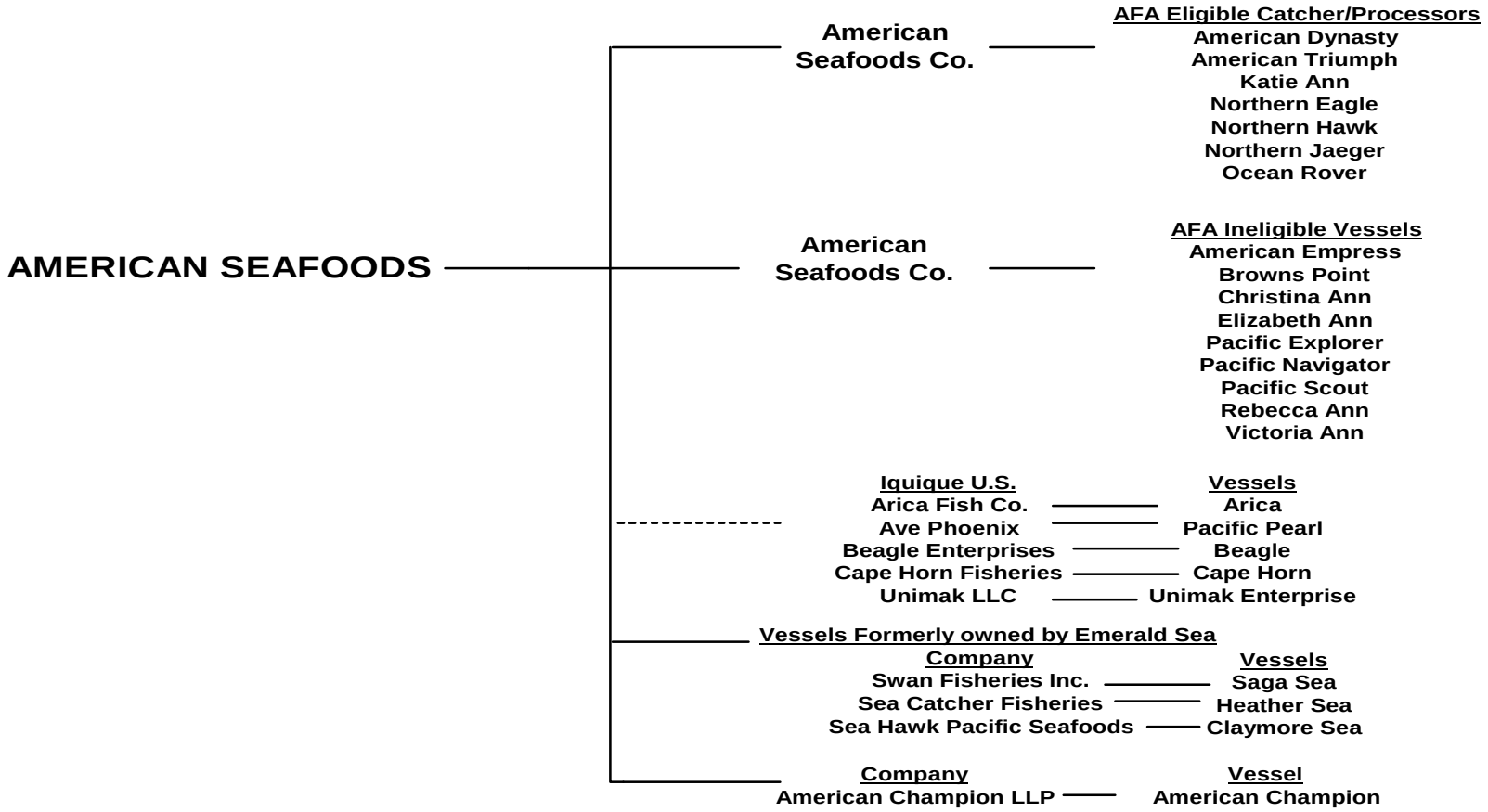
Figure 8.3 Organizational Chart for Aleutian Spray



Note: Galaxy Fisheries, LLC, owns the moratorium permit for the Northern Empire.

Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.; and industry representative discussions.

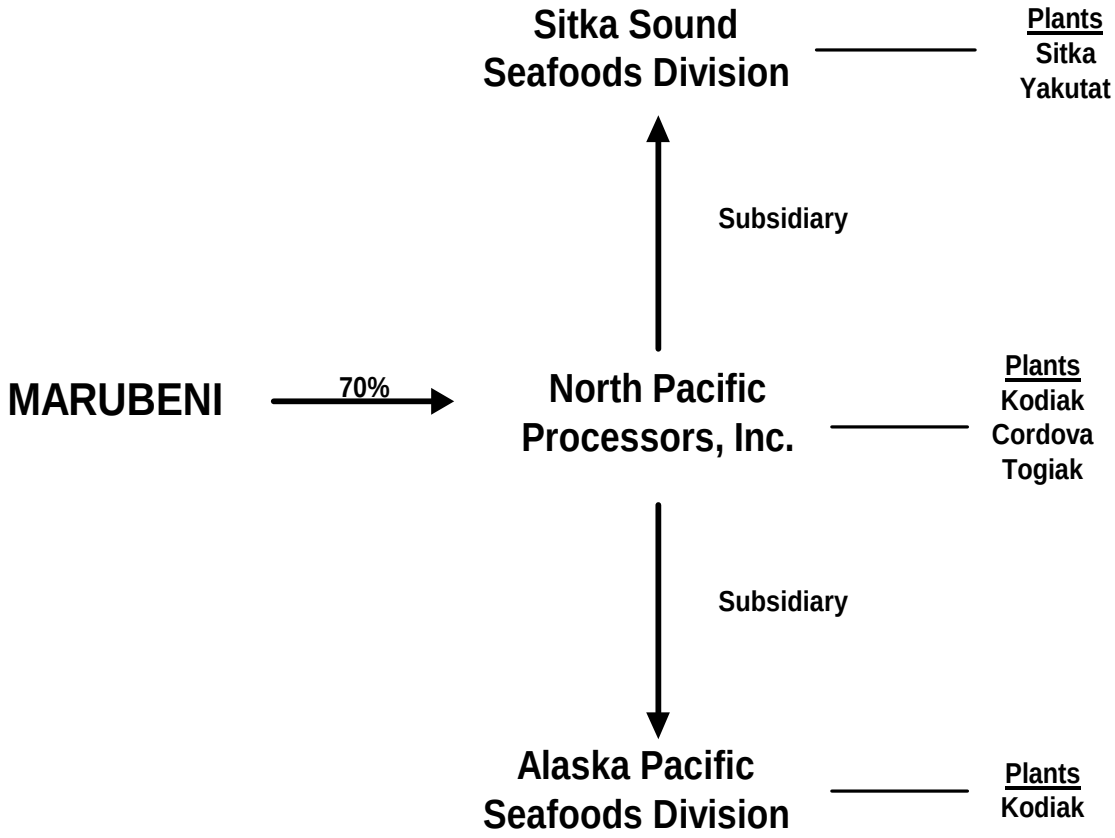
Figure 8.4 Organizational Chart for American Seafoods



Notes: An individual in American Seafood management has ownership or management interest in the group of boats managed by Iquique U.S. Th vessels formerly owned by Emerald Sea are owned by owners of American Seafoods, but are currently operating in Russia. Their U.S. processin and fishing histories remain within the American Seafoods entity. The American Champion is no longer documented in the U.S.

Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.

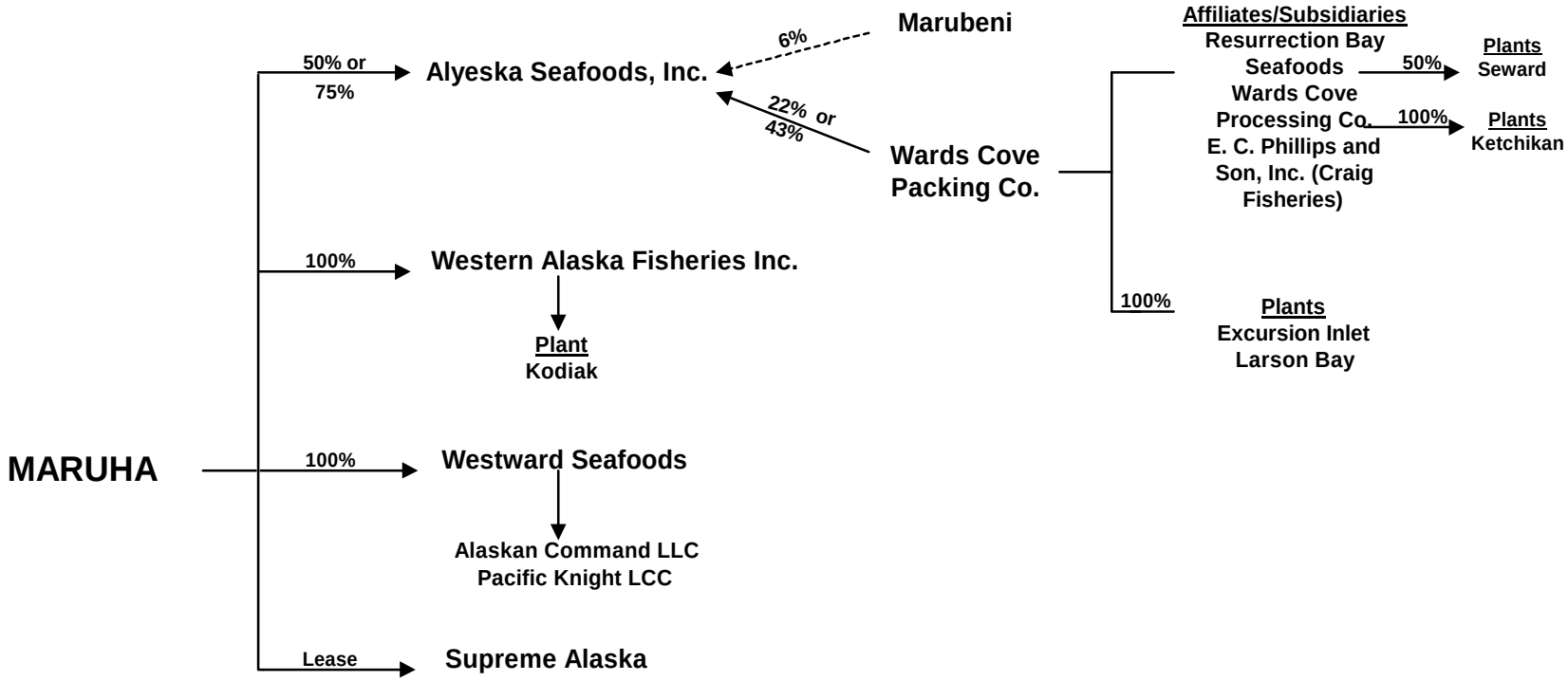
Figure 8.5 Organizational Chart for Marubeni



Note: Alaska Corporation records show Marubeni owns 70% of North Pacific. Other owners are not shown. Dun and Bradstreet records only indicate foreign parent is Marubeni.

Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.

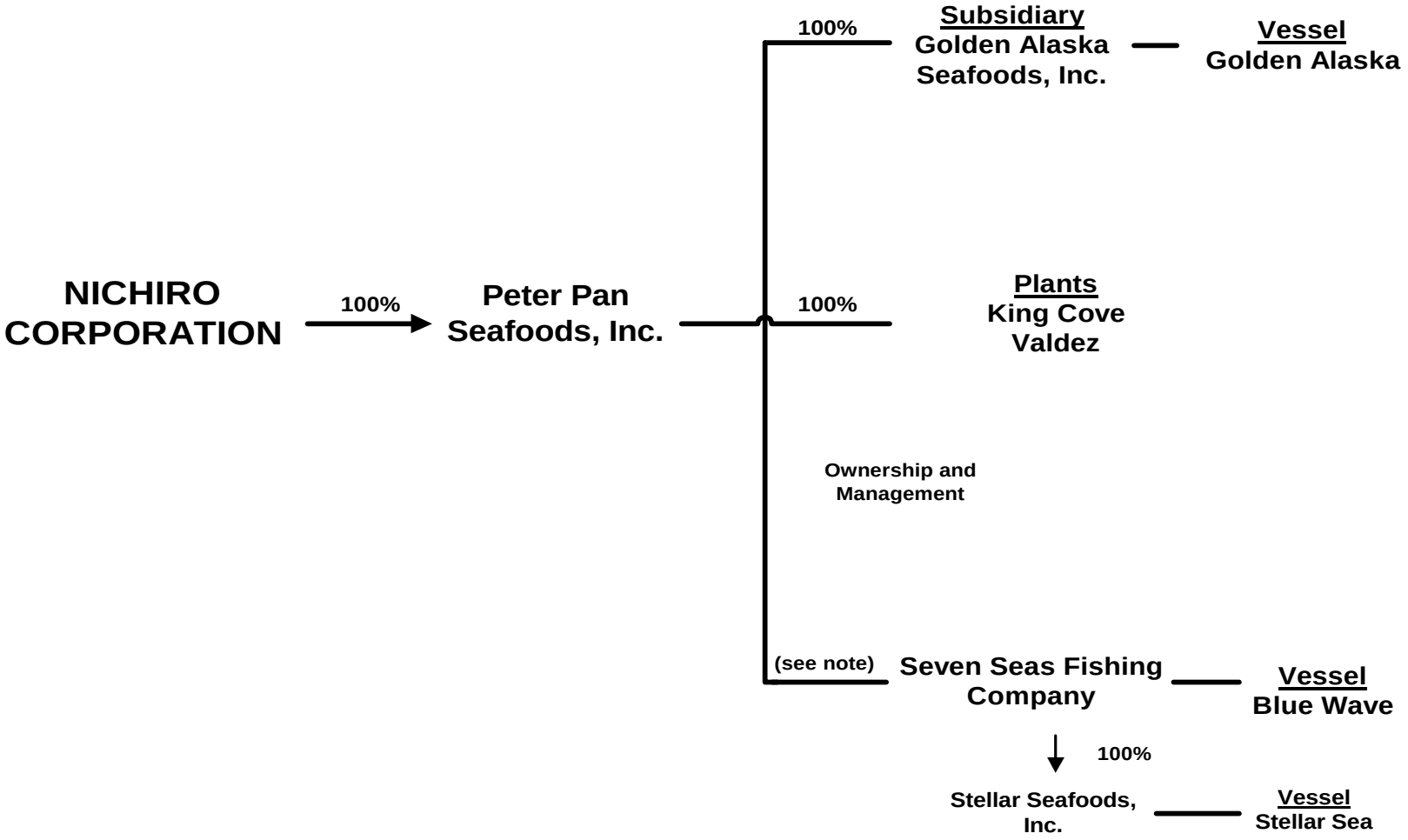
Figure 8.6 Organizational Chart for Maruha



Notes:
1) State of Alaska corporate records indicate Maruha owns 75% of Alyeska and Wards Cove Packing Co. owns 22% of Alyeska. Dun and Bradstreet reports state that Maruha owns 50% and Wards Cove owns 43%.
2) Dun and Bradstreet report dated August 11, 1998 indicates 6% of Alyeska capital stock is owned by Marubeni Corporation and 1% by Western Alaska Fisheries Inc.
3) Dun and Bradstreet reported that Maruha had majority ownership in Alaskan Command.

Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.

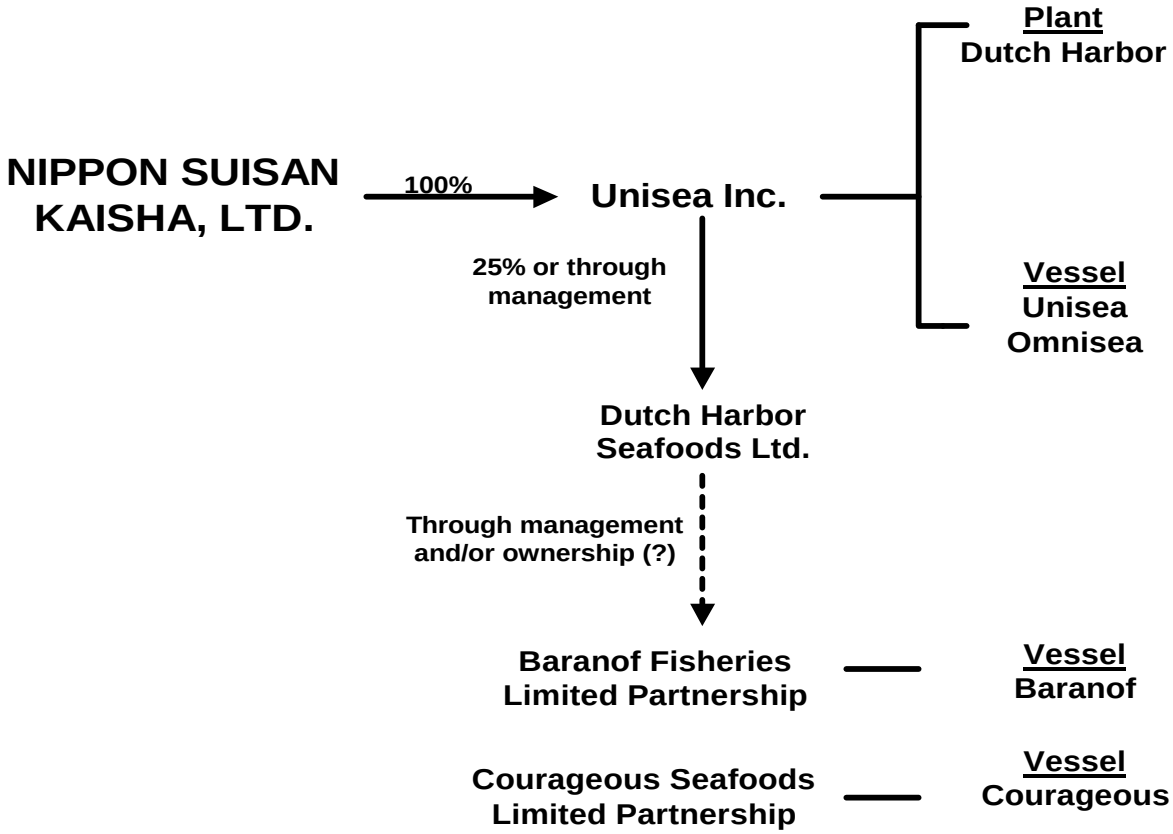
Figure 8.7 Organizational Chart for Nichiro Corporation



Notes:
1) State of Alaska corporatbn records for Seven Seas Fishing Company show Barry Collier, President of Peter Pan Seafoods with 75% of capital stock.
2) Peter Pan Seafoods has 10% and Nichiro Corporation has 15%.

Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.

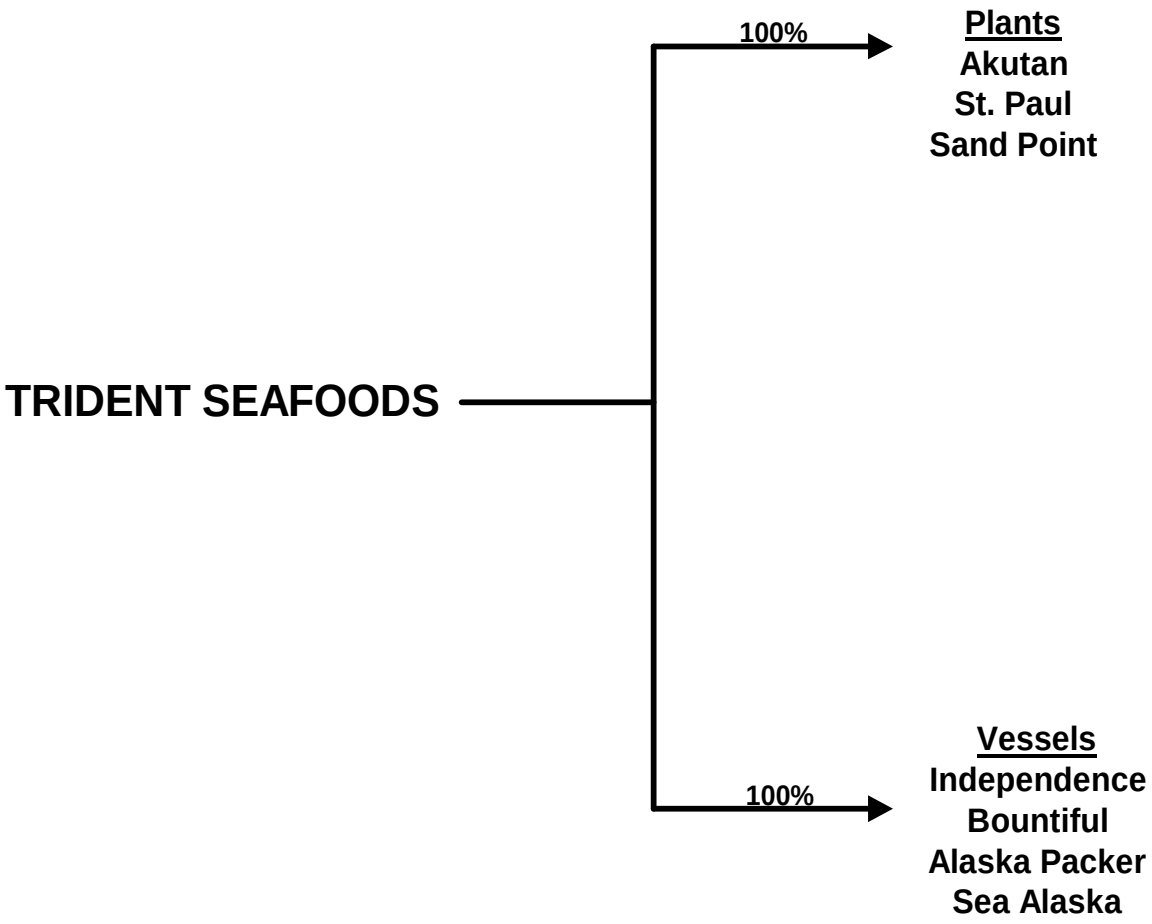
Figure 8.8 Organizational Chart for Nippon Suisan Kaisha, Ltd.



Notes:
1) State of Alaska corporation records show Richard C. White as President and a 20% owner in Dutch Harbor Seafoods. Mr. White is also listed as a partner in the Baranof and Courageous Partnerships although Washington State records do not show level of ownership.
2) According to industry sources, Richard Pace is a limited partner in the Baranof and Courageous Partnerships and according to the State of Washington records, Judith V. Pace, his wife, is a partner in the Baranof and Courageous Partnerships . Mr. Pace was a previous president of Unisea, Inc.
3) Aaron Gilman and Bert Gilman started Universal Seafoods in 1974 and later sold that business to NSK. The Gilmans are both listed as partners in the Baranof and Courageous Partnerships.

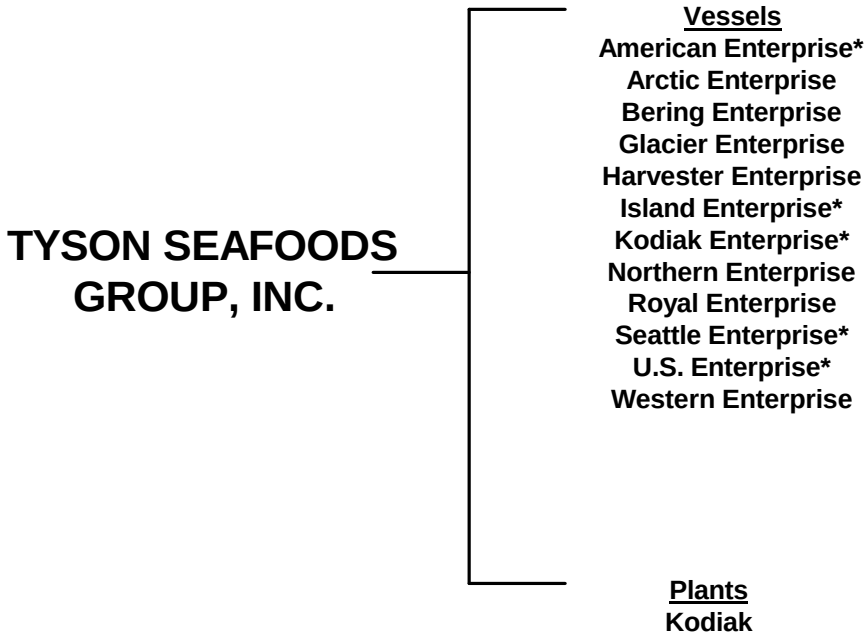
Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc

Figure 8.9 Organizational Chart for Trident Seafoods



Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.

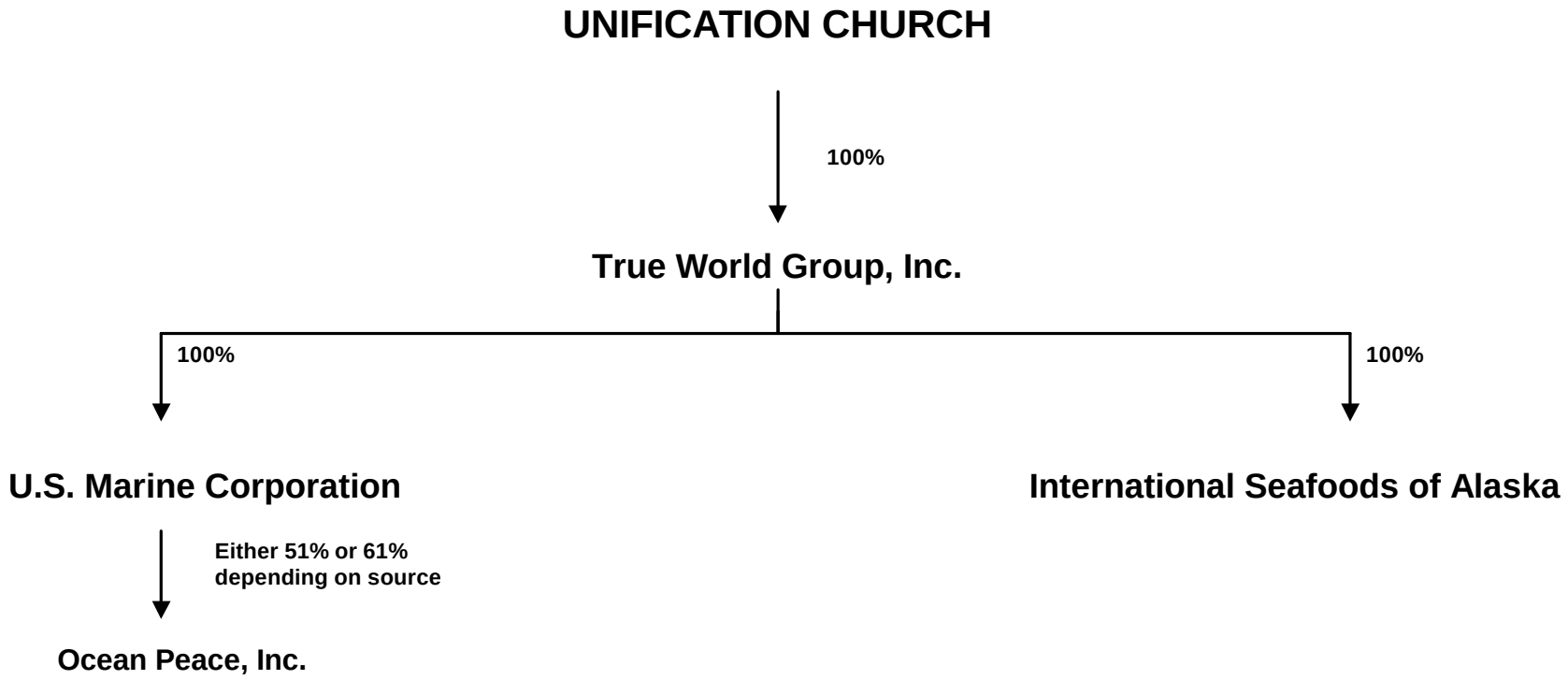
Figure 8.10 Organizational Chart for Tyson Seafoods Group, Inc.



Notes:
1) An asterics indicates AFA eligible catcher/processors.
2) Tyson has recently sold several catcher processors that operated as Tyson vessels between 1995-1997. The vessels listed above were still owned by Tyson as of March 20, 1999.

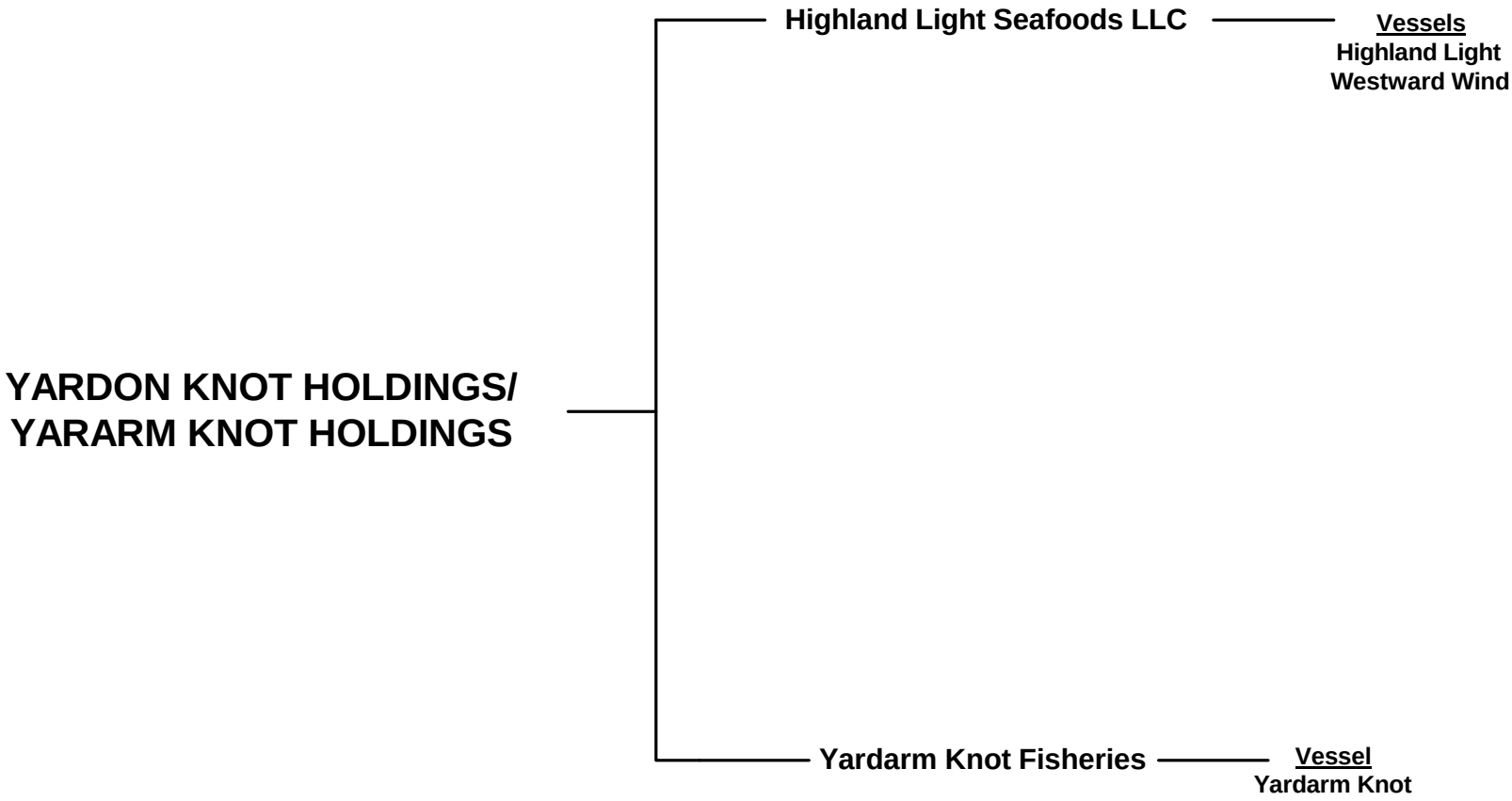
Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.

Figure 8.11 Organizational Chart for Unification Church



Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.

Figure 8.12 Organizational Chart for Yardon Knot Holdings/Yardarm Knot Holdings



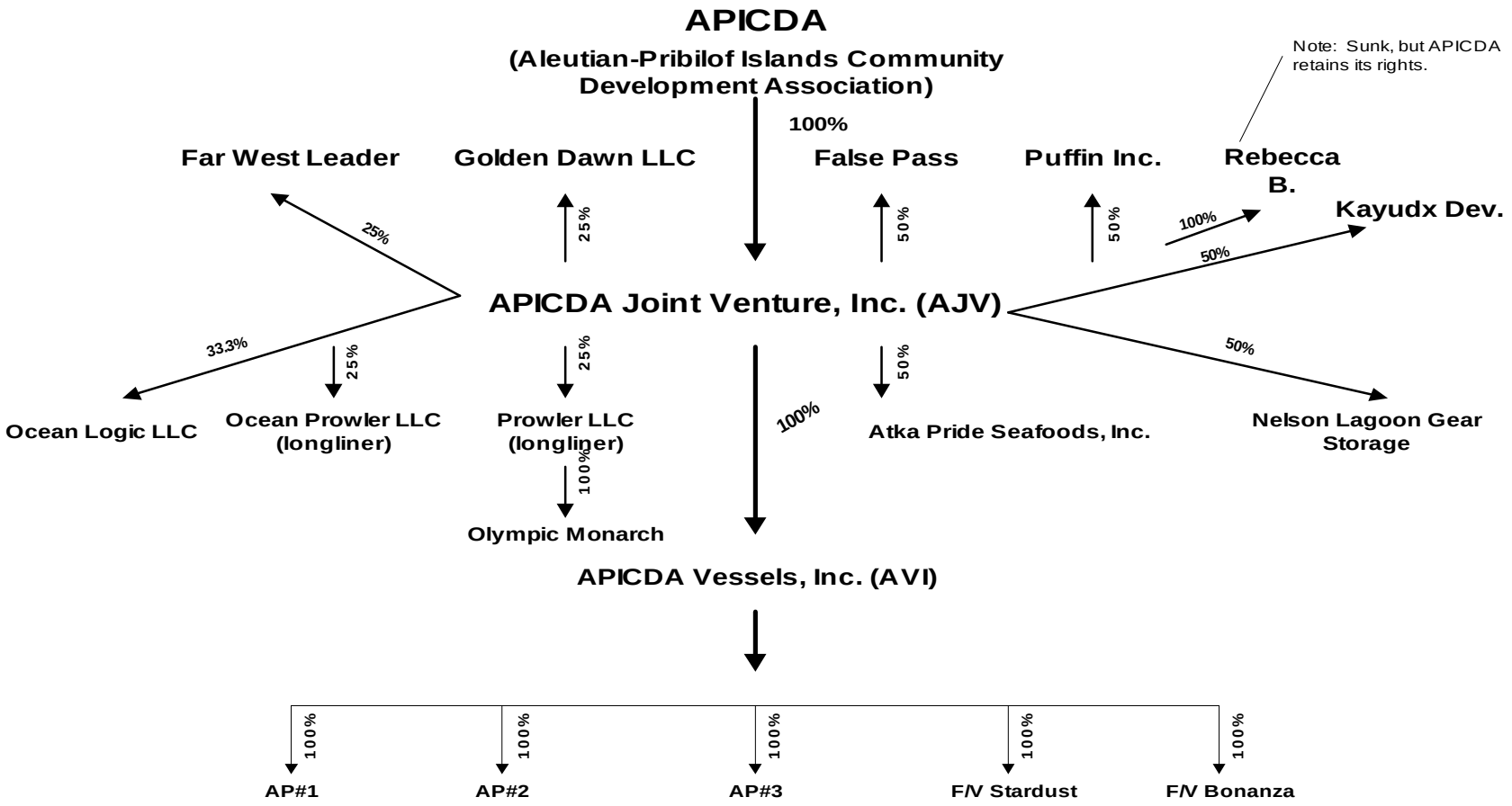
Notes: Yardon Knot Holdings and Yardarm Knot Holdings were both reported in the data bases and have similar ownership structure.

Sources: Ingens Database of Alaska Corporation records; State of Washington Corporation records; Dun and Bradstreet, Inc.; Discussions with industry representatives.

8.2.5 CDQ Groups

Figures 8.13 - 8.18 depict the organization of the six primary CDQ groups. Bristol Bay Economic Development Corporation and Norton Sound Economic Development Corporation have direct investments in AFA-eligible processors. Aleutian Pribilof Island Community Development Association may be associated with an AFA-eligible processor under the 10% Ownership Rule. Basic information sources include the Alaska Department of Community and Regional Affairs. Industry discussions and research of corporate records revealed other links as noted in the charts.

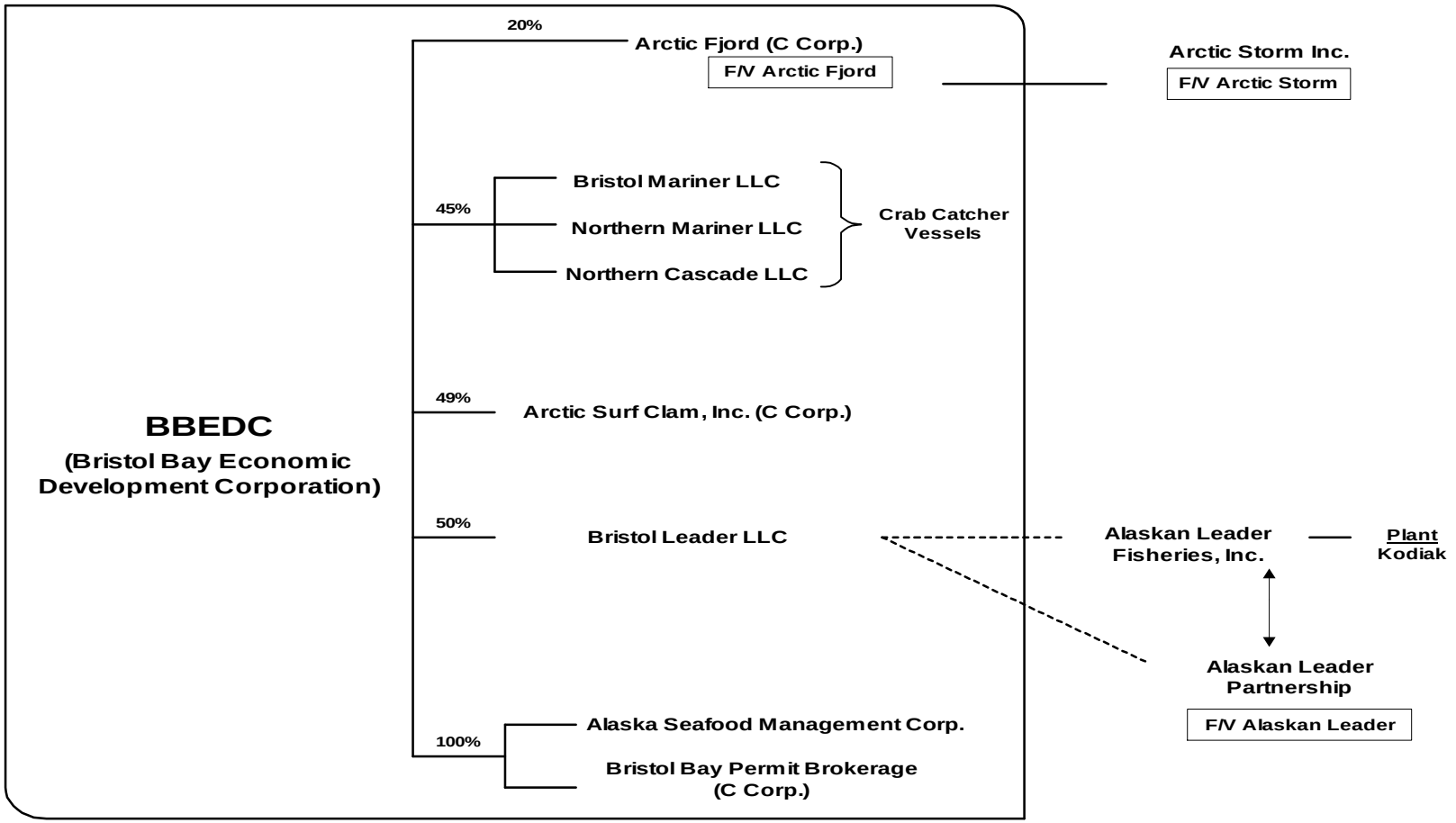
Figure 8.13 Organizational Chart for Aleutian-Pribilof Islands Community Development Association



Notes: AJV is a 100% owner of AVI, which purchases fishing vessels which are leased to fishermen from various southwestern Alaska villages; a 50% owner of Atka Pride Seafoods, Inc. (APS), located in Atka, Alaska, which purchases and processes fish for resale; a 100% owner of Rebecca B, LLC; a 25% owner of Golden Dawn, LLC which is a vessel engaged in pollock fishery; a 33.3% owner of Ocean Logic, LLC which is developing software for fishing vessels; a 25% owner of Ocean Prowler, LLC which owns a 155' longline processing vessel; a 25% owner of Prowler, LLC which owns a 115' longline processing vessel; and a 50% owner of Kayudx Development, LLC which is in the process of commercially developing and planning to operate Tract 1 in the City of St. George, Alaska. Pollock partners: Trident and Starbound.

Prepared by: Glen Haight, DCRA Municipal and Regional Assistance Division, received February 19, 1999.

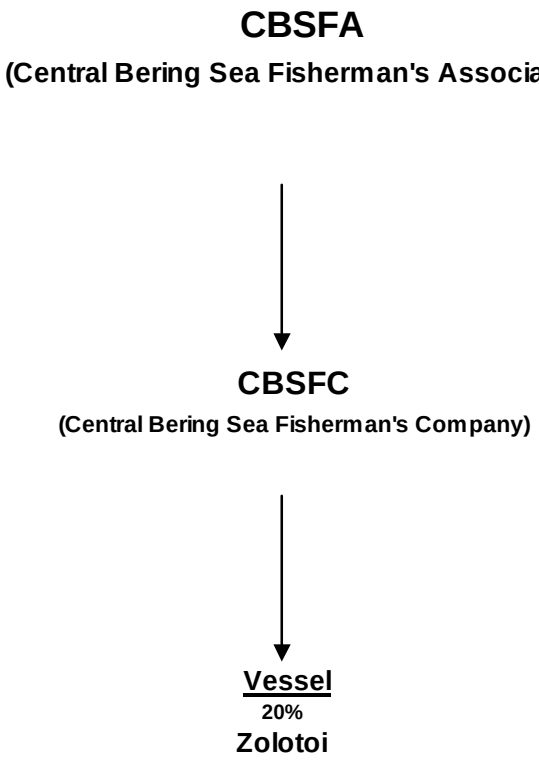
Figure 8.14 Organizational Chart for Bristol Bay Economic Development Corporation



Notes: Arctic Fjord is 20% o wned by five partners. There is also the Arctic Storm Mgmt. Co. which manages both the F/V Arctic Fjord and the F/V Arctic Storm. The F/V Arctic Storm is currently owned 50% by Oyang (Korean Corp) and 50% by same five partners. BB Permit Brokerage and AK Seafood Mgmt Corp are now defunct. Pollock partner: Arctic Storm (previously Oceantrawl). State of Alaska records indicate that 42% of Bristol Leader LLC is owned by a group of six persons, each with 7% ownership, who also control the majority of ownership in the Alaskan Leader Partnership and Alaska Leader Fisheries. Arctic Fjord Inc and Arctic Storm Inc have 3 multiple owners. At least one person owns more than 10% ownership in both companies. Common ownership is approximately 80% for the Arctic Fjord and over 40% for the Arctic Storm.

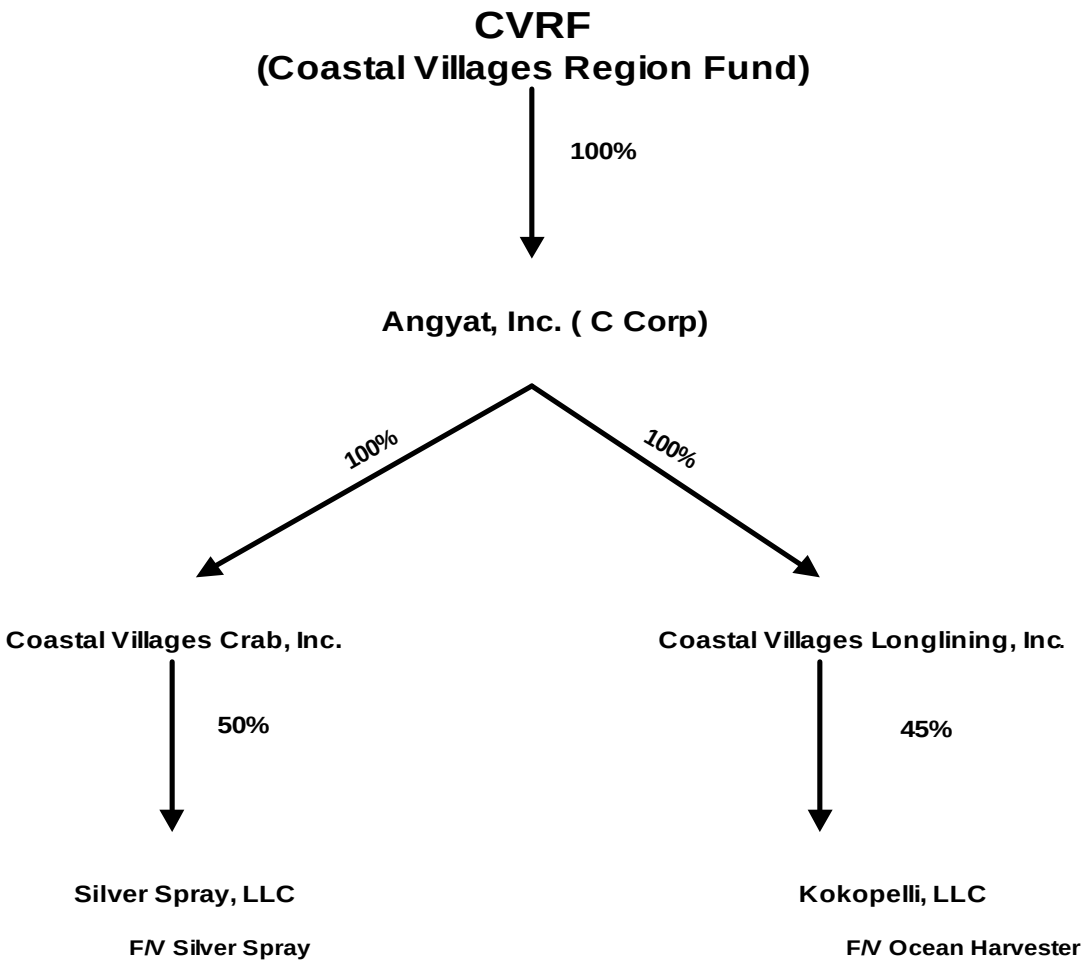
Sources: Information within the box was prepared by Glen Haight, DCRA Municipal and Regional Assistance Division, received February 19, 1999.; Other information is from the State of Alaska corporation records and discussions with industry representatives.

Figure 8.15 Organizational Chart for Central Bering Sea Fisherman's Association



Prepared by: Glen Haight, DCRA Municipal and Regional Assistance Division, received February 19, 1999.

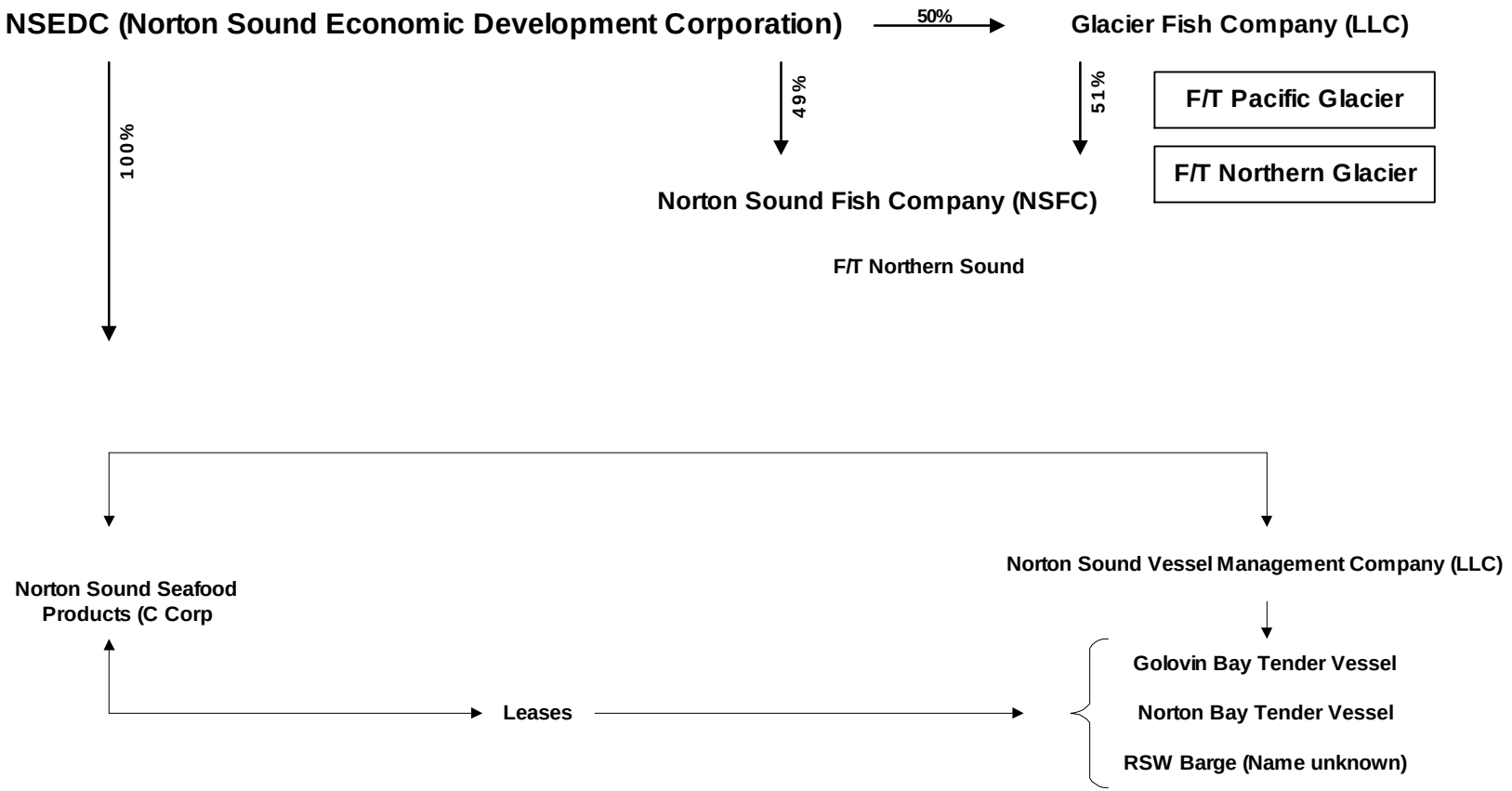
Figure 8.16 Organizational Chart for Coastal Villages Region Fund



Notes: The F/V Silver Spray is a crabber. The F/V Ocean Harvester is a longliner. Pollock partners: Westward and Tyson

Prepared: Glenn Haight, DCRA Municipal & Regional Assistance Division, received Februray 19, 1999.

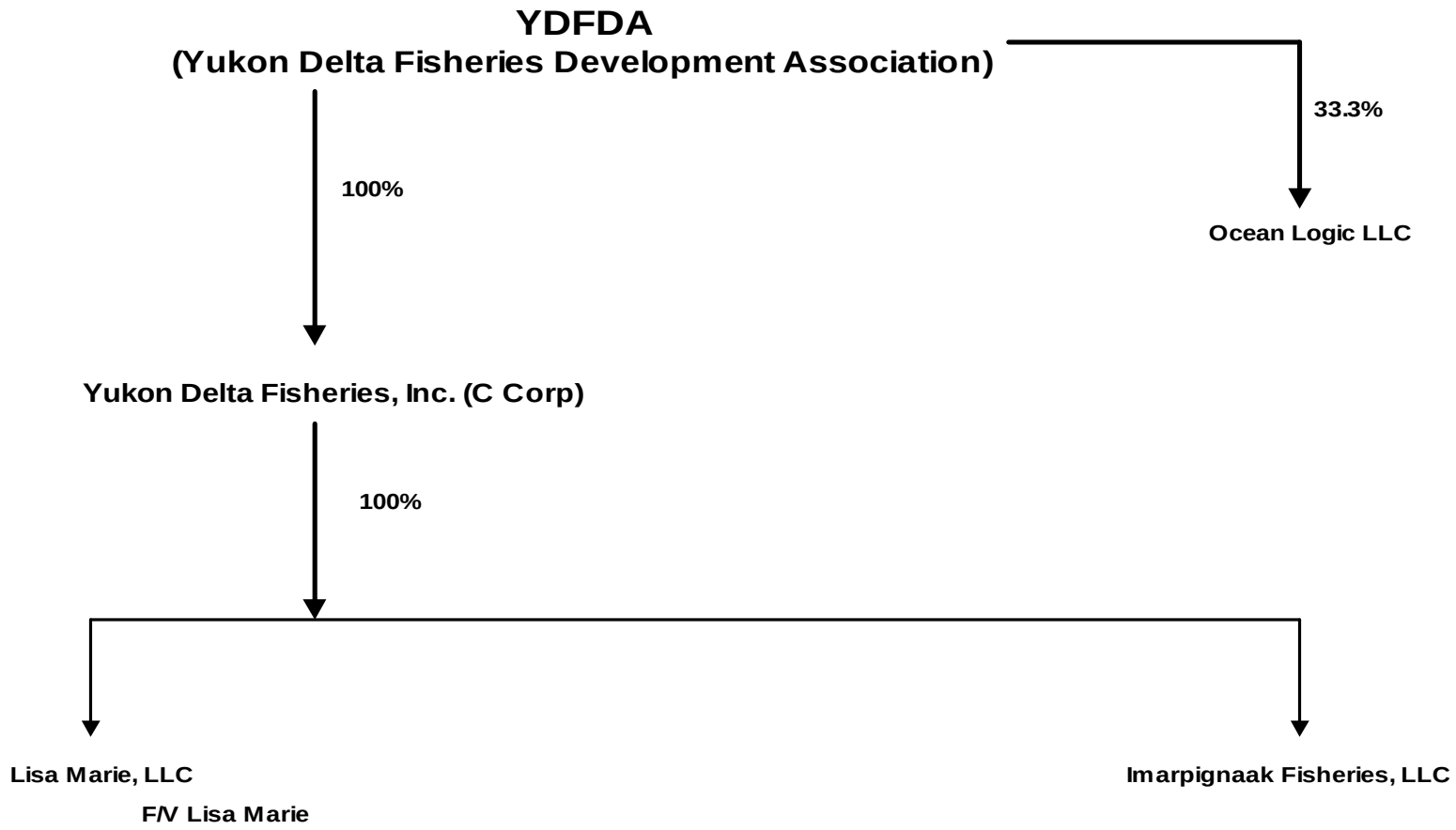
Figure 8.17 Organizational Chart for Norton Sound Economic Development Corporation



Notes: NSFC is owned 49% by NSEDC and 51% by GFC. NSFC owns the F/V Norton Sound, a 139' longline vessel. GFC operates the vessel, Norton Sound Vessel Mgmt. Co. is a subsidiary of NSEDC which manages two specially built tender vessels and which are 100% owned by NSEDC. Norton Sound Seafood Products is a subsidiary of NSEDC which buys and markets various seafood products. GFC owns the 201' Northern Glacier and the 276' Pacific Glacier and an interest in the F/V Norton Soudn. GFC is 50% owned by NSEDC, the other 50% owners are Seattle based individuals (5% John Bundy, 45% Erick Brevik). Pollock partner: GFC.

Sources: Glen Haight, DCRA Municipal and Reigonal Assistance Division, received February 19, 1999.

Figure 8.18 Organizational Chart for Yukon Delta Fisheries Development Association



Notes: Lisa Marie, LLC, is 100% owner of the F/V Lisa Marie which fishes for pollock. Imarpignaak Fisheries, LLC is in the process of purchasing 4 small vessels (for training purposes) from Yukon Delta Fisheries, Inc. Pollock partner: Golden Alaska Seafoods.

Prepared by: Glen Haight, DCRA Municipal and Regional Assistance Division, received February 19, 1999.

8.2.6 Summary of the Ownership Interests of AFA Processors

Table 8.3 summarizes ownership interests of AFA processors in companies and entities developed in the organization charts. These will be used in the estimates of processing limits.

Table 8.3 Specification of AFA Companies and Entities for the Analysis of Processing Limits

Entity	Company	Vessel Name or Location of Plant	ID	AFA Qualified	AFA Company	AFA Entity	Sector
Alaska Ocean LLP	Alaska Ocean LLP	*Alaska Ocean*	P3794	/	/	/	CP
Alaska Trawl Fisheries	Alaska Trawl Fisheries	*Endurance*	P3360	/	/	/	CP
Aleutian Spray Fisheries	Aleutian Spray Fisheries	*Starbound*	P3414	/	/	/	CP
	Aleutian Spray Fisheries	*Galaxy*	F0192		/	/	CP
	Aleutian Spray Fisheries	*Pengwin/Horizon*	P1301		/	/	INS
American Seafoods Co.	American Seafoods Co.	*American Dynasty*	P3681	/	/	/	CP
	American Seafoods Co.	*American Empress*	P2722	/	/	/	CP
	American Seafoods Co.	*American Triumph*	P4055	/	/	/	CP
	American Seafoods Co.	*Browns Point*	P2722	/	/	/	CP
	American Seafoods Co.	*Christina Ann*	P2850	/	/	/	CP
	American Seafoods Co.	*Elizabeth Ann*	P2722	/	/	/	CP
	American Seafoods Co.	*Katie Ann*	P1996	/	/	/	CP
	American Seafoods Co.	*Northern Eagle*	P3261	/	/	/	CP
	American Seafoods Co.	*Northern Hawk*	P4063	/	/	/	CP
	American Seafoods Co.	*Northern Jaeger*	P3896	/	/	/	CP
	American Seafoods Co.	*Ocean Rover*	P3442	/	/	/	CP
	American Seafoods Co.	*Pacific Explorer*	P3416	/	/	/	CP
	American Seafoods Co.	*Pacific Navigator*	P2799	/	/	/	CP
	American Seafoods Co.	*Pacific Scout*	P3383	/	/	/	CP
	American Seafoods Co.	*Rebecca Ann*	P2838	/	/	/	CP
	American Seafoods Co.	*Victoria Ann*	P2839	/	/	/	CP
	American Champion LLP	*American Champion*	F9692		/	/	INS
	Seahawk Pacific Seafoods	*Claymore Sea*	P3362			/	CP
	Seacatcher Fisheries, Inc.	*Heather Sea*	P3664			/	CP
	Swan Fisheries, Inc.	*Saga Sea*	P4056			/	CP
	Arica Fish Co. Ltd.	*Arica*	P3694			Probable	CP
	Cape Horn Fisheries	*Cape Horn*	P2110			Probable	CP
	Ave Phoenix	*Pacific Pearl*	P0276			Probable	CP
	Rebecca Irene, Inc.	*Rebecca Irene*	P1610			Probable	CP
	Unimak Fisheries LLC	*Unimak Enterprise*	P3369			Probable	CP
	Beagle Enterprises LLP	*Beagle*	P0528			Probable	INS
Bristol Bay EDC	Arctic Storm, Inc.	*Arctic Fjord*	P3396	/	/	/	CP
	Arctic Storm, Inc.	*Arctic Storm*	P2943	/	/	/	CP
	Bristol Leader LLC	*New Star/ Bristol Leader*	P3491			/	CP
	Alaskan Leader LLP	*Alaskan Leader*	P4598			Probable	CP
	Alaskan Leader LLP	Kodiak	F1991			Probable	INS
Maruha Corp.	Alyeska Seafoods, Inc.	Dutch Harbor	F0753	/	/	/	INS
	Westward Seafoods, Inc.	Dutch Harbor	F1366	/	/	/	INS
	Supreme Alaska Seafoods	*Excellence*	M4111	/	/	/	MS
	Pacific Knight LLC	*Pacific Knight*	P2783		/	/	CP
	Alaskan Command LLC	*Alaskan Command*	P3391			/	CP
	Wards Cove Packing Co.	*Excursion Inlet*	F0274			/	INS

Entity	Company	Vessel Name or Location of Plant	ID	AFA Qualified	AFA Company	AFA Entity	Sector
Maruha Corp. (cont.)	Wards Cove Packing Co.	Ketchikan	F0110			/	INS
	Wards Cove Packing Co.	Ketchikan	F2185			/	INS
	Western Alaska Fisheries	Kodiak	F0320			/	INS
	Wards Cove Packing Co.	Larsen Bay	F0266			/	INS
	Wards Cove Packing Co.	Seward	F1379			/	INS
	Wards Cove Packing Co.	Seward	F2354			/	INS
Nichiro Corp.	Peter Pan Seafoods, Inc.	King Cove	F0142	/	/	/	INS
	Peter Pan Seafoods, Inc.	*Golden Alaska*	M1607	/	/	/	MS
	Peter Pan Seafoods, Inc.	Valdez	F1041		/	/	INS
	Peter Pan Seafoods, Inc.	*Blue Wave*	F1636		/	/	MS
	Peter Pan Seafoods, Inc.	*Stellar Sea*	M5362		/	/	MS
Nippon Suisan Kaisha	Unisea, Inc.	Dutch Harbor	F1180	/	/	/	INS
	Unisea, Inc.	St. Paul	F0188		/	/	INS
	Unisea, Inc.	*Omnisea*	F1066			/	MS
	Baranof Fisheries	*Baranof*	P1248			Probable	CP
	Courageous Seafoods	*Courageous*	P1276			Probable	CP
Northern Victor LLP	Northern Victor LLP	*Northern Victor*	F1319	/	/	/	INS
Norton Sound EDC	Norton Sound EDC	*Northern Glacier*	P0661	/	/	/	CP
	Norton Sound EDC	*Pacific Glacier*	P3357	/	/	/	CP
	Norton Sound EDC	*Norton Sound*	P5294		/	/	CP
	Norton Sound EDC	Nome	F1809		/	/	INS
	Norton Sound EDC	Unalakleet	F2290		/	/	INS
	Norton Sound EDC	Unknown	F2289		/	/	INS
Phoenix Processor LLP	Phoenix Processor LP	*Ocean Phoenix*	M3703	/	/	/	MS
Trident Seafoods Corp.	Trident Seafoods Corp.	Akutan	F0939	/	/	/	INS
	Trident Seafoods Corp.	Sand Point	F0940	/	/	/	INS
	Trident Seafoods Corp.	*Bountiful*	P0278		/	/	CP
	Trident Seafoods Corp.	South Naknek	F0942		/	/	INS
	Trident Seafoods Corp.	St. Paul	F1927		/	/	INS
	Trident Seafoods Corp.	*Alaska Packer*	F0944		/	/	MS
	Trident Seafoods Corp.	*Independence*	M3259		/	/	MS
	Trident Seafoods Corp.	*Sea Alaska*	F0945		/	/	MS
Tyson Seafoods Group	Tyson Seafoods Group	*American Enterprise*	P2760	/	/	/	CP
	Tyson Seafoods Group	*Island Enterprise*	P3870	/	/	/	CP
	Tyson Seafoods Group	*Kodiak Enterprise*	P3671	/	/	/	CP
	Tyson Seafoods Group	*Seattle Enterprise*	P3245	/	/	/	CP
	Tyson Seafoods Group	*U.S. Enterprise*	P3004	/	/	/	CP
	Tyson Seafoods Group	*Arctic Enterprise*	M5314	/	/	/	INS
	Tyson Seafoods Group	*Bering Enterprise*	P3003		/	/	CP
	Tyson Seafoods Group	*Glacier Enterprise*	F9720		/	/	CP
	Tyson Seafoods Group	*Harvester Enterprise*	P2732		/	/	CP
	Tyson Seafoods Group	*Northern Enterprise*	F9713		/	/	CP
	Tyson Seafoods Group	*Royal Enterprise*	F9723		/	/	CP
	Tyson Seafoods Group	*Western Enterprise*	F9716		/	/	CP
	Tyson Seafoods Group	Kodiak	F0222		/	/	INS
	Tyson Seafoods Group	Kodiak	F1936		/	/	INS
Yak/Yok Holdings	Yak/Yok Holdings	*Highland Light*	P3348	/	/	/	CP
	Yak/Yok Holdings	*Westward Wind*	F9715		/	/	CP
	Yak/Yok Holdings	*Yardarm Knot*	M3116		/	/	MS

8.3 Identification of Ten Options

Processing limits may be applied for each species or species group at three general levels:

1. Single overall limit for all AFA entities combined.
2. Sector limits for inshore, offshore catcher processors, and motherships.
3. Individual limits for an AFA facility, company, entity, etc.

In addition, each level has three layers of AFA eligibility:

1. Eligible plants and vessels
2. Companies that own such plants or vessels
3. Entities that combine eligible companies through 10% ownership

These nine combinations were analyzed along with a tenth option that applies individual company processing limits, but includes only AFA-eligible facilities within those companies.

Here are the ten options described in full:

Option 1 **Overall Limits Applied to All AFA-eligible Facilities**. A single overall processing limit would be set for each species. Only AFA processing facilities would be included. Once the overall limit is reached, no additional processing of the limited species by any included facility would be allowed.

Option 2 **Overall Limits Applied to All Facilities within AFA Companies.** A single overall processing limit would be set for each species. All processing facilities owned by companies that own AFA facilities would be included under the limits. Once the overall limit is reached, no additional processing of the limited species by any included facility would be allowed.

Option 3 **Overall Limits Applied to All Facilities within AFA Entities.** A single overall processing limit would be set for each species. AFA entities would be defined as an umbrella organization under which all processing facilities that are associated with AFA facilities by the 10% Ownership Rule are included under the limits. Once the overall limit is reached, no additional processing of the limited species by any included facility in any of the entities would be allowed.

Option 4 **Sector Level Limits Applied to AFA Facilities.** A processing limit for each species would be applied to each sector. There would be three sectors as defined in the AFA: (1) catcher processors, which include all AFA catcher processors, (2) motherships, which would include all AFA motherships, and (3) inshore, which would include all AFA shore plants and floating processors. Processing histories of all AFA facilities from each sector (including the nine catcher processors listed in §209) would be included in the calculation of the sector limits. Once a sector's limit for a particular species is reached, no additional processing of that species by any AFA facility included in the sector would be allowed.

Option 5 **Sector-Level Limits Applied to All Facilities within AFA Companies.** Sector level processing limits for each species would be imposed upon all facilities in AFA companies as defined by direct ownership of AFA facilities. Three sectors would be defined on the basis

of existing inshore-offshore regulations. The catcher-processor sector would include all catcher processors of any gear type greater than 125 feet LOA and all catcher processors less than 125 feet LOA that process more than 125 tons per week (round weight). The mothership sector would include any non-catching floating-processor that takes delivery of groundfish or BSAI crab species in more than one location during the year, or which takes deliveries outside of state waters. The inshore sector would include all shore plants and non-catching floating-processors that take delivery of groundfish and BSAI crab in a single location within state waters during the year, and all catcher processors less than 125 feet LOA that process less than 125 tons per week (round weight). Once a sector's limit is reached, no additional processing of the limited species by any facility owned by an AFA company included in the sector would be allowed.

Option 6 **Sector-Level Limits Applied to All Facilities within AFA Entities.** Sector-level processing limits for each species would be imposed upon all facilities in AFA entities, as defined by the 10% Ownership Rule. Three sectors would be defined on the basis of existing inshore-offshore regulations. The catcher-processor sector would include all catcher processors of any gear type greater than 125 feet LOA and all catcher processors less than 125 feet LOA that process more than 125 tons per week (round weight). The mothership sector would include any non-catching floating-processor that takes delivery of groundfish or BSAI crab species in more than one location during the year, or which takes deliveries outside of state waters. The inshore sector would include all shore plants and non-catching floating-processors that take delivery of groundfish and BSAI crab in a single location within state waters during the year, and all catcher processors less than 125 feet LOA that process less than 125 tons per week (round weight). Once a sector's limit is reached, no additional processing of the limited species by any facility associated with an AFA entity included in the sector would be allowed.

Option 7 **Individual Plant and Vessel Limits**. An individual facility level processing limit would be imposed. Each AFA plant or vessel would be limited according to its own percentage of the total of each species processed over the historical period. Once a facility's limit for a species is reached, that plant or vessel would not be allowed to process additional amounts of the species.

Option 8 **Individual Company Limits Applied to AFA Facilities**. Processing limits would be imposed on each company that owns AFA plants or vessels. The historical processing of all AFA facilities owned by the company would be included in the company limit. Processing histories of facilities owned by the company but which are not AFA facilities would not be included in the calculation of the company limits, nor would these facilities be affected by the limits. In other words, once a company's limit of a particular species is reached, only non-AFA facilities within the company could continue processing the species.

Option 9 **Individual Company Limits Applied to All Company Facilities**. Processing limits would be issued to each company that owns AFA plants or vessels. The historical processing of all facilities owned by the company would be included in the company limit. The company could decide how the processing of each species is allocated among its facilities. Once a company's limit is reached, no facility owned by the company could process additional amounts of that species.

Option 10 **Individual Entity Limits Applied to All Entity Facilities**. Processing limits would be imposed on each AFA entity. The historical processing of all facilities within the entity would be included in the entity's processing limit. The entity as a group could decide how the processing of each species is allocated among its facilities. Once an entity's limit for a given species is reached, no facility within the entity could process additional amounts of that species.

8.4 Assumptions and Issues

The following assumptions and issues underpin the specification of options above and the analysis, and need to be carefully considered by the Council.

1. Processing limits will not constitute an allocation.

2. Fisheries with processing limits.

Crab Fisheries in the BSAI: If crab fisheries are included, the analysis assumes that limits will be species-specific but not area-specific, i.e., there will be processing limits on Blue King Crab, Brown King Crab, Red King Crab, Bairdi Crab, and Opilio Crab, but not by area.

Groundfish other than pollock in the BSAI: Non-pollock BSAI groundfish limits will be applied to five species groups for the entire BSAI rather than by specific species for specific areas: Pacific Cod, Atka Mackerel, Flatfish, Rockfish, and Other Groundfish without reference to area.

All groundfish in the GOA: GOA groundfish limits will be applied to six species groups for the entire GOA rather than by specific species and area: Pollock, Pacific Cod, Atka Mackerel, Flatfish, Rockfish, and Other Groundfish. Processing limits in the GOA are in addition to the potentially more restrictive language in the AFA regarding Area 630 and pollock and Pacific cod processing. They will not supersede the language in the AFA unless that is the specific intent of Council.

3. Calculation of processing limits.

The following general formula will be used to calculate processing limits for each limited fishery:

$$\frac{\text{Historical Processing of Limited Processors}}{\text{Historical Processing of All Processors}} \times \text{Current Year TAC (or GHL for Crab)} = \text{AFA Processing Limit}$$

The analysis assumes that all AFA eligible facilities will participate in cooperatives.

4. Years included in processing history.

- 1995, 1996, and 1997. These years were indicated in the AFA.
- 1996, 1997 only. These years were proposed by the Council as an alternative.

5. Treatment of non-pollock processing histories of the nine removed catcher processors.

The processing histories of the nine catcher processors listed in section 209 are treated differently depending on how the processing limit is configured. For an overall limit, the histories will be included

in that overall limit. For sector limits, the histories are included in the offshore catcher processor limit. If individual limits are used, the histories will go to American Seafoods as a whole or be apportioned equally among its seven catcher processors.

6. GOA Groundfish processing limits of 20 named catcher processors.

The GOA groundfish processing limits of the 20 catcher processors listed in section 208 of AFA are included in the overall, sector, or individual catcher processors' limits, depending on options chosen. The AFA prohibits those 20 vessels from processing any BSAI crab (none did anyway during 1995-1997), any GOA pollock, any groundfish in GOA Area 630, or more than 10% of the Pacific cod in Areas 610, 620, and 640. However, non-AFA catcher processors included within AFA companies or entities could be allowed to process up to whatever limits are established.

7. Non-pollock processing histories of catcher processors that qualify under §208(e)(21) AFA and shore plants that qualify under §208(f)(1)(B).

It appears that two processing facilities, the *Ocean Peace*, and the shore plant in Kodiak owned by International Seafoods of Alaska, would qualify under these sections. Discussions with members of industry indicated that references to these facilities in the AFA were included to allow these facilities to continue to process pollock in directed fisheries as part of the allocations in §206 of the AFA, but that it was not intended that they would be limited unless they participated in cooperatives. Because it is not anticipated that these facilities will participate in cooperatives, their processing histories have not been included in the calculation of processing limits.

8. Processing histories of AFA-eligible facilities that choose not to participate in cooperatives.

All 23 catcher processors and motherships specified in the AFA, and the shore plants and floaters that processed 2,000 or more tons of pollock in 1996 and 1997, are assumed to participate in cooperatives. Therefore, their processing histories are included in the calculation of the limits. If their histories are included in calculating the limits, but they choose not to be in a cooperative, will the non-participating facilities have to cease processing if an applicable processing limit is reached? **In general, for all options presented, the Council will need to decide whether processing limits would be applied when facilities/companies do not participate in co-ops.**

9. Use of 10% Ownership Rule in the determination of AFA entities.

The analysis treats the ownership of each individual in a family separately. The Council may wish to treat the ownership of currently married individuals and the minor children as a single ownership stake for purposes of the 10% Ownership Rule. Further, the analysis assumes that CDQ companies and organization are treated no differently from other companies. Issues of "control" have been discussed earlier. As noted then, this analysis focuses more on ownership.

10. Fixed processing limits, or adjustable limits to account for changes in ownership patterns or the participation of AFA-eligible facilities in cooperatives.

For example, a non-AFA processing company purchases an AFA-eligible facility. The new owner would become an AFA company. If the limits are intended to preclude AFA companies from expanding their processing in non-pollock species, then it stands to reason that the new owner's

processing in its non-AFA plants would be added into the AFA processing total for that species. Once a processing limit for a given species is reached, then the new owner will have to cease processing that species at all of its facilities. If processing limits are fixed, then the new owner's processing history from its original plants would not be included in the processing limit calculation, but the current processing of its original non-AFA plants would count toward the limits. In this example, a closure could result before any of the facilities has processed its historical percentage of the species.

11. Vessels that are not eligible under the Crab and/or Groundfish License Limitation Program (LLP).

The analysis uses all catch and processing of all vessels and processing facilities that participated in 1995-1997, and does not verify whether all catcher processors would qualify for a license under the LLP. It is not believed that there were significant numbers of unqualified vessels participating in those years.

12. Processing totals of vessels or plants that have been destroyed or replaced.

Since 1995, there have been several vessels or plants that have been destroyed or replaced. In some of those cases, catch and processing histories have been transferred to new owners who have built new vessels or processing facilities to replace the old. It is possible that AFA companies or members of AFA entities own the catch and processing histories of some of the destroyed or replaced facilities. The analysis assumes that the catch and processing histories of such destroyed or replaced facilities will be included in the calculation of AFA processing limits. However, it should be noted that it is possible that some of the lost or destroyed vessels may not be eligible for licenses under the Crab LLP. Because of the difficulties in documenting destroyed or replaced vessels, the analysis includes processing of all facilities that participated in the fisheries between 1995 and 1997.

13. Processing totals of vessels that have been removed from U.S. documentation.

It is possible that some vessels that are no longer U.S.-documented fishing vessels (in addition to the nine vessels removed in the AFA) may contribute to the AFA processing limits. In some cases, the processing histories of those vessels may be sufficient to qualify replacement vessels under the LLP, and it is possible that the owners of those fishing histories have already built replacement vessels. Because of the difficulties of confirming current U.S. documentation of all vessels, the analysis includes the catch and processing of all vessels that participated in the fisheries between 1995 and 1997. If the Council chooses to exclude these vessels, then processing histories of all vessels that have given up their documentation should be removed from both the numerator and the denominator of the calculation for calculating limits.

14. Interactions of processing limits with Improved Retention and Improved Utilization (IRIU).

If a processing limit is reached for a species that is caught as bycatch in other fisheries, will processing of the other species be limited as well? As an example, assume that a processing limit for Pacific cod is reached, but the processing limit for flatfish has yet to be attained. Bycatch of Pacific cod is almost unavoidable in flatfish fisheries, and therefore it is likely that additional Pacific cod will be caught or delivered to flatfish processors. If those processors cannot process additional Pacific cod, and they cannot discard the Pacific cod because of IRIU, then in effect they cannot process additional flatfish (must refuse delivery).

15. Crab GHLs

How will processing limits be applied to crab species when the Guideline Harvest Level (GHL) is set as a range, or when crab species are managed by season?

16. Treatment of Bycatch.

If a processing limit for a species is reached, the processors affected by that limit, whether at the individual, sector, or overall level, will be prohibited from processing additional amounts of that species, even if delivered as bycatch. NMFS may, however, employ a phased approach of imposing processing limits that would allow the processing of bycatch amounts of a limited species after a predetermined threshold is reached.

17. Defining AFA facilities, companies, and entities.

Processing limits will be set at the beginning of the year and may vary with the number of participating facilities and species TACs. Facilities, companies and entities must declare before the calendar year which facilities will participate in pollock cooperatives. That declaration will define which facilities, companies and entities are AFA-related. If a company or entity has at least one AFA eligible facility, that company or entity is defined as an AFA company or entity.

18. NMFS verification procedures.

NMFS will have the ultimate responsibility for defining AFA facilities, companies, and entities. Ownership structure will need to be detailed in affidavits showing ownership shares down to the 10 percent ownership level. If a company, corporation, or partnership owns the processor, then additional details showing the individual owners of the company, corporation, or partnership must also be provided. The processor's permit application will also contain signed affidavits from all companies, corporations, partnerships and individuals that own at least a 10 percent share of the processor. The affidavits will indicate all other processing facilities in which the company, partnership, or individual has at least a 10 percent ownership share. After defining AFA facilities, companies or entities, NMFS will send documentation to each one describing the company and ownership linkages. A representative of the facility, company or entity will have to acknowledge the ownership structure and agree to abide by the processing limits, or be denied a permit.

If sector limits are to be used, the representative will also have to declare which sector his facility will operate based on already established inshore-offshore criteria.

AFA-eligible inshore floating processors, if they participate in pollock cooperatives, must declare as part of the inshore sector, and may not process crab or groundfish in a location other than the location in which they process pollock.

8.5 Results of the Analysis of Ten Options

This section presents the results of the analysis of the ten options. It quantifies the limits as they pertain to various levels and layers within levels, and qualitatively assesses the efficacy of the option in meeting the objectives previously described.

8.5.1 Option 1: Overall Processing Limits Applied to All AFA Facilities

A single overall processing limit would be set for each species and would encompass all AFA facilities. Once the overall limit is reached, no additional processing of the limited species by any AFA facility would be allowed. Under this option, only AFA facilities would be limited. If a company owns an AFA facility and a non-AFA facility, only the AFA facility would be affected by the processing limits.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the overall processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. However, other processors included within the AFA processing limits will be allowed to process the 20 catcher processors' historical portions of GOA groundfish species. (The 20 catcher processors listed in §208 of the AFA did not process any crab during the historical processing period.)

A qualitative assessment of the effectiveness of this option in meeting the 10 objectives introduced in Subsection 8.1.5 is given in Table 8.5 along with an assessment for the other options. The table shows each of those objectives with a presumed rating from the perspective of an interest group. The objectives are rated "good", "fair" or "poor", relative to the other options, and where a "fair" rating implies that there are worse options and there are better options. The ratings are made from the analyst's presumption of the attitudes of the stated interest group, but do not necessarily reflect the actual judgement of the group.

Table 8.4 shows estimates of overall processing limits for AFA facilities for each species group, based first on the processing histories of AFA facilities in 1995-1997 and then on only 1996-1997.

Table 8.4 Option 1: Overall Limit Applied to All AFA Facilities, 1995-1997 and 1996-1997

	Percent of Total Processing					
Bering Sea Aleutian Islands Groundfish						
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Rockfish**	
1995-1997	13.64	33.57	22.78	37.95	19.23	
1996-1997	13.04	33.73	23.48	38.75	18.74	
Gulf of Alaska Groundfish						
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Pollock**	**Rockfish**
1995-1997	14.23	7.88	4.58	31.83	47.45	9.25
1996-1997	9.94	6.66	4.55	35.55	46.73	8.11
Crab						
	Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**	
1995-1997	56.47	18.63	55.77	19.03	55.21	
1996-1997	61.09	16.61	55.08	19.70	57.43	

Table 8.5 Summary of the Qualitative Analysis of Processing Limits

	Overall Limits			Sector Limits			Individual Limits			
	Option 1 Facility	**Option 2 Company**	**Option 3 Entity**	**Option 4 Facility**	**Option 5 Company**	**Option 6 Entity**	**Option 7 Facility**	**Option 8 Company**	**Option 9 AFA/Co.**	**Option 10 Entity**
Objectives from the Perspective of Proponents of Processing Limits										
1. How does the option rate in terms of limiting AFA processing of species other than BSAI pollock to the levels achieved prior to the passage of the AFA?	Poor	Fair	Good	Poor	Fair	Good	Poor	Fair	Poor	Good
2. How does the option rate in terms of including all processing interests of AFA companies?	Poor	Fair	Good	Poor	Fair	Good	Poor	Fair	Poor	Good
3. How does the option rate in terms of preventing AFA companies from evading the limits through subsidiaries or holding companies?	Poor	Fair	Good	Poor	Fair	Good	Poor	Fair	Poor	Good
Objectives from the Perspective of AFA Processors										
4. How does the option rate in terms of allowing AFA processors to maximize their ability to realize profits in the pollock processing industry?	Good	Good	Good	Good	Good	Good	Poor	Good	Good	Good
5. How does the option rate in terms of allowing AFA processors to be able to utilize non-pollock processing capacity improvements completed prior to passage of the AFA?	Fair	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Good	Fair
6. How does the option rate in terms of its effect on the market value of AFA facilities?	Good	Fair	Poor	Fair	Fair	Poor	Good	Fair	Good	Poor
Objectives from the Perspective of Non-pollock Processors Linked to AFA Processors										
7. How does the option rate in terms of restricting non-pollock processors that will not benefit directly from the AFA?	Good	Good	Poor	Good	Good	Poor	Good	Good	Good	Poor
Objectives from the Perspective of NMFS										
8. How does the option rate in terms of the Paperwork Reduction Act?	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Good	Poor
9. How does the option rate in terms of the NMFS ability to determine and set the limits?	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Good	Poor
10. How does the option rate in terms of the NMFS ability to manage the limits in-season?	Good	Fair	Fair	Good	Poor	Poor	Fair	Fair	Fair	Fair

Notes:

1/ The objectives are given a presumed rating relative to the other options from the perspective of the interest group shown. A fair rating implies that there are worse options and better options.

2/ The column headed "AFA/Co." is for the option that imposes individual processing limits on the AFA facilities in a company, but does not limit non-AFA facilities in the company.

8.5.2 Option 2: Overall Limits Applied to All Facilities in AFA Companies

A single overall processing limit would be set for each species and would encompass all of the processing facilities of companies that have a direct majority ownership stake in AFA facilities. In effect the primary criterion under which two or more processing facilities are considered to be owned by a single company will be whether the majority of ownership in each facility is held by the same individuals or companies, regardless of whether each individual's or company's relative shares are identical In this section, companies that own AFA facilities are referred to as AFA companies. Once the overall limit is reached, no additional processing of the limited species by any facility owned by any AFA company would be allowed. The 10% Ownership Rule would not be applied under this option, and only those facilities that are within the AFA companies would be limited.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the catcher-processor sector processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. However, other non-AFA catcher processors included within AFA catcher-processor sector limits will be allowed to process up to the catcher-processor sector processing limits for crab and GOA groundfish species. (The 20 catcher processors listed in §208 of the AFA did not process any crab during the historical processing period.)

Table 8.6 shows estimates of overall processing limits for AFA companies for each species group. The estimates are based on the processing histories of all facilities in AFA companies for 1995-1997 and 1996-1997. The effectiveness of the processing limits is shown in Table 8.5.

Table 8.6 Option 2: Overall Limit Applied to All Facilities within AFA Companies, 1995-1997 and 1996-1997.

	Percent of Total Processing					
Bering Sea Aleutian Islands Groundfish						
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Rockfish**	
1995-1997	13.93	36.82	26.09	42.19	25.99	
1996-1997	13.17	35.79	26.56	43.50	24.72	
Gulf of Alaska Groundfish						
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Pollock**	**Rockfish**
1995-1997	16.86	21.87	8.48	44.31	58.27	25.03
1996-1997	10.07	21.00	8.82	48.11	56.04	25.27
Crab						
	Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**	
1995-1997	65.15	74.05	59.93	61.67	69.37	
1996-1997	61.09	74.52	55.79	62.64	70.04	

8.5.3 Option 3: Overall Limits Applied to All Facilities in AFA Entities

This section discusses a single overall processing limit that would be set for each species and would encompass all of the processing facilities of AFA entities, as defined by the 10% Ownership Rule. Once the overall limit is reached, no additional processing of the limited species by any facility associated with any AFA entity would be allowed.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the catcher-processor sector processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. However, other non-AFA catcher processors included within AFA catcher-processor sector limits will be allowed to process up to the catcher-processor sector processing limits for crab and GOA groundfish species. (The 20 catcher processors listed in §208 of the AFA did not process any crab during the historical processing period.)

Tables 8.7 and Table 8.8 show estimates of overall processing limits for AFA entities for each species group. The entities are based on the organizational analysis from Section 8.2, and therefore the estimates should be viewed as analytical estimates rather than final limits. The tables provide ranges of estimated limits for each species group. The lower values are derived from facilities that the analysts were able to document as part of an AFA entity and are shown in the rows labeled "documented". Higher estimates of the limits are shown in rows labeled "possible." The higher estimates were derived by adding to the documented totals, the processing volumes of other facilities that may be considered part of an AFA entity once final rules are determined and additional information and verification has been gathered. As before, the qualitative analysis of the efficacy of this option is shown in Table 8.5.

Table 8.7 Option 3: Overall Limit Applied to All Facilities Within AFA Entities, 1995-1997

	Percent of Total Processing					
Bering Sea Aleutian Islands Groundfish						
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Rockfish**	
Documented	13.94	38.48	28.34	44.36	27.68	
Possible	15.01	54.26	39.07	51.09	43.53	
Gulf of Alaska Groundfish						
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Pollock**	**Rockfish**
Documented	17.21	28.72	17.40	50.56	66.93	29.39
Possible	19.48	32.37	20.93	51.27	67.10	37.20
Crab						
	Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**	
Documented	65.38	74.05	59.93	61.67	69.37	
Possible	66.90	74.56	59.93	63.31	70.20	

Notes:

1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.

2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation.

Table 8.8 Option 3: Overall Limit Applied to All Facilities Within AFA Entities, 1996 and 1997

	Percent of Total Processing					
Bering Sea Aleutian Islands Groundfish						
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Rockfish**	
Documented	13.18	35.95	27.73	43.91	24.97	
Possible	13.92	52.51	39.24	50.61	41.15	
Gulf of Alaska Groundfish						
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Pollock**	**Rockfish**
Documented	10.13	29.35	19.19	54.49	65.44	31.17
Possible	11.36	32.23	22.90	54.72	65.57	39.41
Crab						
	Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**	
Documented	61.83	74.52	55.79	62.64	70.04	
Possible	62.40	74.90	55.79	64.41	70.92	

Notes:

1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.

2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation.

8.5.4 Option 4: Sector-Level Processing Limits Applied to All AFA Facilities

Sector-level processing limits would be imposed for each species upon all AFA facilities as defined in the AFA aggregated across the offshore, mothership, and shoreside processors. Once the sector limit is reached, no additional processing of the limited species by any AFA facility would be allowed.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the catcher-processor sector processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. However, other non-AFA catcher processors included within AFA catcher-processor sector limits will be allowed to process up to the catcher-processor sector processing limits for crab and GOA groundfish species. (The 20 catcher processors listed in §208 of the AFA did not process any crab during the historical processing period.)

Table 8.9 shows estimates of sector level processing limits for AFA facilities for each species group. The estimates are based on the processing histories of AFA facilities during the years 1995, 1996, and 1997. Table 8.10 shows estimates of sector level processing limits for AFA facilities for each species group, based on the processing histories of AFA facilities during the years 1996 and 1997. The efficacy of this option is evaluated in Table 8.5.

Table 8.9 Option 4: Sector-Level Limits Applied to AFA Facilities, 1995-1997

	Percent of Total Processing by Sectors			
Species by Area	**Catcher Processors**	**Inshore Processors**	**Motherships**	**Total**
Bering Sea Aleutian Islands Groundfish				
Atka Mackerel	12.81	0.23	0	13.64
Flatfish	25.41	7.86	0.46	33.73
Other Species	9.31	13.39	0.78	23.48
Pacific Cod	11.73	25.41	1.61	38.75
Rockfish	9.32	8.51	0.91	18.75
Gulf of Alaska Groundfish				
Atka Mackerel	0.27	9.67	-	9.94
Flatfish	4.64	2.02	0	6.66
Other Species	0.89	3.66	-	4.56
Pacific Cod	2.42	33.10	0.03	35.55
Pollock	0.96	45.68	0.09	46.72
Rockfish	6.87	1.24	-	8.11
Crab				
Bairdi	-	56.47	-	56.47
Blue King	-	18.63	-	18.63
Brown King	-	55.77	-	55.77
Opilio	-	19.03	-	19.03
Red King	-	55.21	-	55.21

Table 8.10 Option 4: Sector-Level Limits Applied to AFA Facilities, 1996 and 1997

	Percent of Total Processing by Sectors			
Species by Area	**Catcher Processors**	**Inshore Processors**	**Motherships**	**Total**
Bering Sea Aleutian Islands Groundfish				
Atka Mackerel	12.81	0.23	0	13.04
Flatfish	25.41	7.86	0.46	33.73
Other Species	9.31	13.39	0.78	23.48
Pacific Cod	11.73	25.41	1.61	38.75
Rockfish	9.32	8.51	0.91	18.74
Gulf of Alaska Groundfish				
Atka Mackerel	0.27	9.67	-	9.94
Flatfish	4.64	2.02	0	6.66
Other Species	0.89	3.66	-	4.55
Pacific Cod	2.42	33.10	0.03	35.55
Pollock	0.96	45.68	0.09	46.73
Rockfish	6.87	1.24	-	8.11
Crab				
Bairdi	-	61.09	-	61.09
Blue King	-	16.61	-	16.61
Brown King	-	55.08	-	55.08
Opilio	-	19.70	-	19.70
Red King	-	57.43	-	57.43

8.5.5 Option 5: Sector-Level Limits Applied to All Facilities in AFA Companies

Sector-level processing limits would be imposed for each species upon all facilities in AFA companies as defined by direct ownership of AFA facilities. Sectors would be defined on the basis of the existing inshore/offshore regulations. The catcher processor sector would include all catcher processors of any gear type greater than 125 feet LOA and all catcher processors less than 125 feet LOA that process more than 125 tons per week (round weight). The mothership sector would include any non-catching floating processor that takes delivery of groundfish or BSAI crab species in more than one location during the year, or which takes deliveries outside of state waters. The inshore sector would include all shore plants and non-catching floating processors that take delivery of groundfish and BSAI crab in a single location within state waters during the year, and all catcher processors of any gear type less than 125 feet LOA that process less than 125 tons per week (round weight). Once the sector limit is reached, no additional processing of the limited species by any AFA facility in the sector would be allowed.

The primary criterion under which two or more processing facilities are considered to be owned by a single company will be whether the majority of ownership in each facility is held by the same individuals or companies, regardless of whether each individual's company's relative shares are identical. Once the sector limit is reached, no additional processing of the limited species by any facility owned by an AFA company included in the sector would be allowed.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the catcher-processor sector processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. However, other non-AFA catcher processors included within AFA catcher-processor sector limits will be allowed to process up to the catcher-processor sector processing limits for crab and GOA groundfish species. (The 20 catcher processors listed in §208 of the AFA did not process any crab during the historical processing period.)

Table 8.11 shows estimates of sector level processing limits for AFA companies for each species group. The estimates are based on the processing histories of all facilities in AFA companies during the years 1995, 1996, and 1997, and the assumptions delineated above. Table 8.12 shows similar information for 1996-1997.

Table 8.11 Option 5: Sector-Level Limits Applied to All Facilities Within AFA Companies, 1995-1997

	Percent of Total Processing by Sectors			
Species by Area	**Catcher Processors**	**Inshore Processors**	**Motherships**	**Total**
Bering Sea Aleutian Islands Groundfish				
Atka Mackerel	12.95	0.23	0	13.17
Flatfish	27.37	7.87	0.56	35.79
Other Species	12.11	13.41	1.04	26.56
Pacific Cod	14.81	25.49	3.20	43.50
Rockfish	15.08	8.52	1.12	24.72
Gulf of Alaska Groundfish				-
Atka Mackerel	0.30	9.76	-	10.07
Flatfish	9.09	11.91	0	21.00
Other Species	1.96	6.86	0	8.82
Pacific Cod	2.84	44.03	1.25	48.11
Pollock	1.05	54.9	0.09	56.04
Rockfish	20.27	5.00	0	25.27
Crab				
Bairdi	3.31	58.91	2.94	65.15
Blue King	2.79	34.54	36.71	74.05
Brown King	3.56	56.37	0	59.93
Opilio	4.44	30.48	26.76	61.67
Red King	0.65	61.43	7.30	69.37

Table 8.12 Option 5: Sector-Level Limits Applied to All Facilities Within AFA Companies, 1996 and 1997

	Percent of Total Processing by Sectors			
Species by Area	**Catcher Processors**	**Inshore Processors**	**Motherships**	**Total**
Bering Sea Aleutian Islands Groundfish				
Atka Mackerel	12.95	0.23	0	13.17
Flatfish	27.37	7.87	0.56	35.79
Other Species	12.11	13.41	1.04	26.56
Pacific Cod	14.81	25.49	3.20	43.50
Rockfish	15.08	8.52	1.12	24.72
Gulf of Alaska Groundfish				
Atka Mackerel	0.30	9.76	-	10.07
Flatfish	9.09	11.91	0	21.00
Other Species	1.96	6.86	0	8.82
Pacific Cod	2.84	44.03	1.25	48.11
Pollock	1.05	54.90	0.09	56.04
Rockfish	20.27	5	0	25.27
Crab				
Bairdi	0	61.09	0	61.09
Blue King	0	35.31	39.21	74.52
Brown King	0	55.79	0	55.79
Opilio	4.22	31.56	26.86	62.64
Red King	0.69	61.76	7.59	70.04

8.5.6 Option 6: Sector-Level Limits Applied to All Facilities in AFA Entities

Sector-level processing limits would be applied for each species to all facilities in AFA entities, as defined by the 10% Ownership Rule. Sectors would be defined as in Option 5. Once the sector limit is reached, no additional processing of the limited species by any entity that owns an AFA-eligible facility included in the sector would be allowed. All processing facilities associated with an AFA entity would be affected by the limit.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the catcher-processor sector processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. However, other non-AFA catcher processors included within AFA catcher-processor sector limits will be allowed to process up to the catcher-processor sector processing limits for crab and GOA groundfish species. (The 20 catcher processors listed in §208 of the AFA did not process any crab during the historical processing period.)

Tables 8.13 and 8.14 show, for the two time periods, estimates of sector level processing limits for AFA entities for each species group. The entities are based on the organizational analysis from Section 8.2, and therefore the estimates should be viewed as analytical estimates rather than final limits. The tables provide ranges of estimated limits for each species group. The lower values are derived from facilities that the analysts were able to document as part of an AFA entity and are shown in the rows labeled "documented." Higher estimates of the limits are shown in rows labeled "possible." The higher estimates were derived by adding to the documented totals, the processing volumes of other facilities that may be considered part of an AFA entity once final rules are determined and additional information and verification has been gathered.

Table 8.13 Option 6: Sector-Level Limits Applied to All Facilities Within AFA Entities, 1995-1997

Species by Area	AFA Links	Percent of Total Processing by Sectors			
		Catcher Processors	Inshore Processors	Motherships	Total
Bering Sea Aleutian Islands Groundfish					
Atka Mackerel	documented	12.95	0.23	0	13.18
	possible	13.69	0.23	0	13.92
Flatfish	documented	27.41	7.94	0.60	35.65
	possible	42.77	9.15	0.60	52.52
Other Species	documented	12.80	13.73	1.20	27.73
	possible	23.35	14.69	1.20	39.24
Pacific Cod	documented	14.99	25.49	3.43	43.91
	possible	21.49	25.69	3.43	50.61
Rockfish	documented	15.16	8.53	1.28	24.97
	possible	30.33	9.54	1.28	41.15
Gulf of Alaska Groundfish					
Atka Mackerel	documented	0.30	9.82	-	10.12
	possible	1.54	9.82	-	11.36
Flatfish	documented	9.09	19.05	1.21	29.35
	possible	10.73	20.29	1.21	32.23
Other Species	documented	1.96	17.10	0.13	19.19
	possible	3.23	19.54	0.13	22.90
Pacific Cod	documented	2.84	50.35	1.30	54.49
	possible	2.98	50.44	1.30	54.72
Pollock	documented	1.05	64.30	0.09	65.44
	possible	1.18	64.31	0.09	65.48
Rockfish	documented	20.27	10.64	0.26	31.17
	possible	28.14	11.01	0.26	39.41
Crab					
Bairdi	documented	3.31	59.13	2.94	65.38
	possible	4.83	59.13	2.94	66.90
Blue King	documented	2.79	34.54	36.71	74.05
	possible	3.31	34.54	36.71	74.56
Brown King	documented	3.56	56.37	0	59.93
	possible	3.56	56.37	0	59.93
Opilio	documented	4.44	30.48	26.76	61.67
	possible	6.08	30.48	26.76	63.31
Red King	documented	0.65	61.43	7.30	69.37
	possible	1.47	61.43	7.30	70.20

Notes:
1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.
2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation.

Table 8.14 Option 6 Sector-Level Limits Applied to All Facilities Within AFA Entities, 1996 and 1997

		Percent of Total Processing by Sectors			
Species by Area	AFA Links	Catcher Processors	Motherships	Inshore Processors	Total
Bering Sea Aleutian Islands Groundfish					
Atka Mackerel	documented	12.95	0	0.23	13.18
	possible	13.69	0	0.23	13.92
Flatfish	documented	27.41	0.60	7.94	35.95
	possible	42.77	0.60	9.15	52.51
Other Species	documented	12.80	1.20	13.73	27.73
	possible	23.35	1.20	14.69	39.24
Pacific Cod	documented	14.99	3.43	25.49	43.91
	possible	21.49	3.43	25.69	50.61
Rockfish	documented	15.16	1.28	8.53	24.97
	possible	30.33	1.28	9.54	41.15
Gulf of Alaska Groundfish					
Atka Mackerel	documented	0.30	-	9.82	10.13
	possible	1.54	-	9.82	11.36
Flatfish	documented	9.09	1.21	19.05	29.35
	possible	10.73	1.21	20.29	32.23
Other Species	documented	1.96	0.13	17.10	19.19
	possible	3.23	0.13	19.54	22.90
Pacific Cod	documented	2.84	1.30	50.35	54.49
	possible	2.98	1.30	50.44	54.72
Pollock	documented	1.05	0.09	64.30	65.44
	possible	1.18	0.09	64.31	65.57
Rockfish	documented	20.27	0.26	10.64	31.17
	possible	28.14	0.26	11.01	39.41
Crab					
Bairdi	documented	0	0	61.83	61.83
	possible	0.56	0	61.83	62.40
Blue King	documented	0	39.21	35.31	74.52
	possible	0.38	39.21	35.31	74.90
Brown King	documented	0	0	55.79	55.79
	possible	0	0	55.79	55.79
Opilio	documented	4.22	26.86	31.56	62.64
	possible	5.98	26.86	31.56	64.41
Red King	documented	0.69	7.59	61.76	70.04
	possible	1.58	7.59	61.70	70.92

Notes:
1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.
2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation.

8.5.7 Option 7: Individual Processing Limits Applied to Each AFA Facility

Individual processing limits for each species would be imposed upon each AFA eligible facility. Once the individual facility reaches a limit for a particular species, no additional processing of the limited species by that facility in the sector would be allowed. The limits would not constitute an allocation, and would not guarantee that a facility could process a specified percentage of the TAC. As with other sideboard alternatives, a decision has to be made as to whether the limit would apply in the event a facility does not participate in a co-op.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the catcher-processor sector processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. The Council should make a decision regarding the ability of these catcher processors to shift historical processing from Area 630 to other areas for purposes of the processing limits. (The 20 catchers listed in §208 of the AFA did not process any crab during the historical processing period.)

Tables 8-15-8.20 show estimates of individual processing limits for AFA facilities for each species group and two time periods. Actual plant identities have been hidden for reasons of confidentiality.

Table 8.15 Option 7: Individual Plant and Vessel Limits for Bering Sea Aleutian Island Groundfish, 1995-1997

AFA Plant Number	Sector	Percent of Total Processing				
		Atka Mackerel	Flatfish	Other Species	Pacific Cod	Rockfish
1	CP	0	0.14	0.41	0.85	0.17
2	INS	0.03	3.93	2.75	3.76	1.35
3	INS	0	0.25	0.69	2.24	1.15
4	MS	0	0.56	0.35	0.88	0.57
5	CP	1.77	0.02	0.65	0.12	0.09
6	INS	0.06	0.69	3.09	7.66	2.54
7	CP	0	0.12	0.66	1.14	0.20
8	CP	1.37	0.70	0.91	0.91	0.52
9	CP	1.37	3.10	0.89	0.94	1.05
10	CP	0	2.50	0.37	0.18	0.49
11	CP	2.62	0.70	0.68	0.94	0.58
12	CP	0	1.98	0.27	0.14	0.45
13	INS	0	0.03	0.09	0.12	0.03
14	CP	-	0.03	0.04	0.03	0.01
15	CP	1.37	3.37	0.88	0.97	1.20
16	INS	0.11	0.19	0.76	1.46	1.37
17	INS	0.01	0.16	0.79	2.63	0.42
18	CP	1.37	0.73	0.66	0.87	0.53
19	CP	0	0.06	0.05	0.09	0.03
20	MS	0	0.04	0.18	0.35	0.07
21	INS	0.03	1.97	1.61	3.21	0.89
22	CP	-	6.08	0.82	0.39	1.17
23	CP	1.40	1.02	0.67	1.75	0.79
24	CP	0.72	1.78	0.69	0.26	1.57
25	CP	-	0.04	0.08	0.06	0.05
26	CP	-	0.01	0.01	0.01	0
27	CP	0.01	0.07	0.14	0.95	0.15
28	CP	0	0.07	0.10	0.15	0.04
29	CP	1.37	2.62	0.74	0.95	0.83
30	MS	0	0.07	0.10	0.12	0.07
31	INS	0.02	0.50	2.66	3.82	0.85
Total		**13.64**	**33.57**	**22.78**	**37.95**	**19.23**

Note: The processing of the nine facilities that were removed from the fishery according to AFA has been redistributed to the remaining seven facilities owned by American Seafoods

Table 8.16 Option 7: Individual Plant and Vessel Limits Gulf of Alaska Groundfish, 1995-1997

AFA Plant Number	Sector	Percent of Total Processing					
		Atka Mackerel	Flatfish	Other Species	Pacific Cod	Pollock	Rockfish
1	CP	-	0	0	0	0.03	-
2	INS	2.98	0.06	0.33	0.56	3.26	0.04
3	INS	0	0.02	0.01	0.20	1.70	0
4	MS	-	0	-	0.01	0.08	-
5	CP	-	-	-	-	-	-
6	INS	0.16	0.06	0.02	0.89	0.82	0.04
7	CP	-	-	-	-	-	-
8	CP	0.03	0.77	0.10	0.21	0.14	0.43
9	CP	0.03	0.79	0.10	0.21	0.11	0.43
10	CP	-	-	-	-	-	-
11	CP	0.03	0.77	0.10	0.45	0.13	0.43
12	CP	-	0	-	0	0.04	-
13	INS	1.17	1.04	1.24	14.86	27.12	0.60
14	CP	-	0	0	0	0.05	-
15	CP	0.03	0.77	0.10	0.21	0.05	0.43
16	INS	0.34	0.12	0.01	0.31	0.40	0.01
17	INS	0.96	0.67	1.18	12.21	5.68	0.22
18	CP	0.03	0.77	0.10	0.21	0.05	0.43
19	CP	-	-	-	-	-	-
20	MS	-	0	-	0	0.01	-
21	INS	4.57	0.06	0.24	0.38	2.3	0.03
22	CP	-	-	-	-	-	-
23	CP	0.03	0.77	0.10	0.21	0.05	0.43
24	CP	0.08	0.10	0.34	0.34	0.04	5.22
25	CP	-	-	-	-	-	-
26	CP	-	-	-	-	-	-
27	CP	-	0.27	0.01	0.01	0.23	0.05
28	CP	-	0	0	0	0.08	-
29	CP	0.03	0.77	0.10	0.21	0.16	0.43
30	MS	-	0	-	0	0.02	-
31	INS	3.78	0.06	0.52	0.35	4.88	0.05
Total		**14.23**	**7.88**	**4.58**	**31.83**	**47.45**	**9.25**

Note: The processing of the nine facilities that were removed from the fishery according to AFA has been redistributed to the remaining seven facilities owned by American Seafoods

Table 8.17 Option 7: Individual Plant and Vessel Limits for Crab, 1995-1997

AFA Plant Number	Sector	Percent of Total Processing				
		Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**
1	CP	-	-	-	-	-
2	INS	12.14	1.68	7.72	2.55	12.45
3	INS	-	-	-	-	-
4	MS	-	-	-	-	-
5	CP	-	-	-	-	-
6	INS	16.65	2.92	0.67	2.24	14.09
7	CP	-	-	-	-	-
8	CP	-	-	-	-	-
9	CP	-	-	-	-	-
10	CP	-	-	-	-	-
11	CP	-	-	-	-	-
12	CP	-	-	-	-	-
13	INS	-	-	-	-	-
14	CP	-	-	-	-	-
15	CP	-	-	-	-	-
16	INS	-	-	-	-	-
17	INS	14.06	2.15	-	5.07	13.05
18	CP	-	-	-	-	-
19	CP	-	-	-	-	-
20	MS	-	-	-	-	-
21	INS	6.03	4.92	16.75	3.36	7.50
22	CP	-	-	-	-	-
23	CP	-	-	-	-	-
24	CP	-	-	-	-	-
25	CP	-	-	-	-	-
26	CP	-	-	-	-	-
27	CP	-	-	-	-	-
28	CP	-	-	-	-	-
29	CP	-	-	-	-	-
30	MS	-	-	-	-	-
31	INS	7.59	6.96	30.63	5.82	8.10
Total		**56.47**	**18.63**	**55.77**	**19.03**	**55.21**

Note: The processing of the nine facilities that were removed from the fishery according to AFA has been redistributed to the remaining seven facilities owned by American Seafoods.

Table 8.18 Option 7: Individual Plant and Vessel Limits Bering Sea Aleutian Island Groundfish, 1996 and 1997

AFA Plant Number	Sector	Percent of Total Processing				
		Atka Mackerel	Flatfish	Other Species	Pacific Cod	Rockfish
1	CP	0	0.1	0.36	0.93	0.18
2	INS	0.03	4.12	2.92	3.72	1.50
3	INS	0.01	0.25	0.86	2.33	1.12
4	MS	0	0.33	0.49	1.17	0.83
5	CP	2.11	0.02	0.86	0.13	0.11
6	INS	0.03	0.84	3.77	8.52	2.67
7	CP	0	0.13	0.59	1.44	0.24
8	CP	1.29	0.70	0.99	0.82	0.47
9	CP	1.29	3.22	0.75	0.90	0.96
10	CP	0	2.45	0.27	0.14	0.61
11	CP	2.49	0.69	0.66	0.86	0.52
12	CP	-	2.05	0.30	0.14	0.57
13	INS	0	0.03	0.08	0.12	0.04
14	CP	-	0.03	0.05	0.02	0.02
15	CP	1.29	3.61	0.90	0.95	1.29
16	INS	0.10	0.18	0.91	1.70	1.37
17	INS	0.01	0.19	0.84	2.82	0.45
18	CP	1.29	0.70	0.64	0.83	0.48
19	CP	0	0.08	0.06	0.09	0.05
20	MS	0	0.04	0.17	0.32	0.03
21	INS	0.02	1.85	1.52	2.61	0.75
22	CP	-	6.34	0.73	0.39	1.49
23	CP	1.29	1.03	0.62	1.73	0.75
24	CP	0.46	1.70	0.57	0.15	0.56
25	CP	-	0.04	0.10	0.06	0.07
26	CP	-	-	-	-	-
27	CP	0.01	0.07	0.16	1.14	0.16
28	CP	0	0.06	0.08	0.07	0.04
29	CP	1.29	2.38	0.63	0.93	0.75
30	MS	0	0.09	0.12	0.13	0.05
31	INS	0.02	0.41	2.49	3.58	0.62
Total		**13.04**	**33.73**	**23.48**	**38.75**	**18.75**

Note: The processing of the nine facilities that were removed from the fishery according to AFA has been redistributed to the remaining seven facilities owned by American Seafoods

Table 8.19 Option 7: Individual Plant and Vessel Limits Gulf of Alaska Groundfish, 1996 and 1997

AFA Plant Number	Sector	Percent of Total Processing					
		Atka Mackerel	Flatfish	Other Species	Pacific Cod	Pollock	Rockfish
1	CP	-	0	0	0	0.05	-
2	INS	3.79	0.05	0.43	0.51	1.23	0.04
3	INS	0	0.01	0.01	0.13	2.14	0
4	MS	-	0	-	0.02	0.05	-
5	CP	-	-	-	-	-	-
6	INS	0	0.03	0.02	0.65	0.41	0.06
7	CP	-	-	-	-	-	-
8	CP	0.04	0.60	0.06	0.28	0.12	0.05
9	CP	0.04	0.60	0.06	0.28	0.06	0.05
10	CP	-	-	-	-	-	-
11	CP	0.04	0.60	0.06	0.65	0.18	0.05
12	CP	-	0	-	0	0.06	-
13	INS	0.16	1.09	1.48	17.39	30.32	0.82
14	CP	-	-	-	-	-	-
15	CP	0.04	0.60	0.06	0.28	0.06	0.05
16	INS	0.02	0.07	0.01	0.26	0.59	0
17	INS	0.09	0.68	1.09	13.68	6.25	0.25
18	CP	0.04	0.60	0.06	0.28	0.06	0.05
19	CP	-	-	-	-	-	-
20	MS	-	0	-	0.01	0.02	-
21	INS	5.43	0.04	0.08	0.11	1.76	0.01
22	CP	-	-	-	-	-	-
23	CP	0.04	0.60	0.06	0.28	0.06	0.05
24	CP	0.02	0.07	0.48	0.06	0.02	6.44
25	CP	-	-	-	-	-	-
26	CP	-	-	-	-	-	-
27	CP	-	0.38	0.02	0.02	0.08	0.08
28	CP	-	-	-	-	-	-
29	CP	0.04	0.60	0.06	0.28	0.23	0.05
30	MS	-	0	-	0	0.02	-
31	INS	0.17	0.04	0.54	0.37	2.98	0.05
Total		**9.94**	**6.66**	**4.56**	**35.55**	**46.72**	**8.11**

Note: The processing of the nine facilities that were removed from the fishery according to AFA has been redistributed to the remaining seven facilities owned by American Seafoods.

Table 8.20 Option 7: Individual Plant and Vessel Limits for Crab, 1996 and 1997

AFA Plant Number	Sector	Percent of Total Processing				
		Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**
1	CP	-	-	-	-	-
2	INS	13.67	2.52	9.68	2.91	13.35
3	INS	-	-	-	-	-
4	MS	-	-	-	-	-
5	CP	-	-	-	-	-
6	INS	13.09	2.80	1.04	1.68	14.76
7	CP	-	-	-	-	-
8	CP	-	-	-	-	-
9	CP	-	-	-	-	-
10	CP	-	-	-	-	-
11	CP	-	-	-	-	-
12	CP	-	-	-	-	-
13	INS	-	-	-	-	-
14	CP	-	-	-	-	-
15	CP	-	-	-	-	-
16	INS	-	-	-	-	-
17	INS	18.45	1.43	-	5.34	13.52
18	CP	-	-	-	-	-
19	CP	-	-	-	-	-
20	MS	-	-	-	-	-
21	INS	9.13	3.12	16.16	3.22	7.58
22	CP	-	-	-	-	-
23	CP	-	-	-	-	-
24	CP	-	-	-	-	-
25	CP	-	-	-	-	-
26	CP	-	-	-	-	-
27	CP	-	-	-	-	-
28	CP	-	-	-	-	-
29	CP	-	-	-	-	-
30	MS	-	-	-	-	-
31	INS	6.75	6.75	28.20	6.55	8.21
Total		**61.09**	**16.61**	**55.08**	**19.70**	**57.43**

Note: The processing of the nine facilities that were removed from the fishery according to AFA has been redistributed to the remaining seven facilities owned by American Seafoods.

8.5.8 Option 8: Individual Processing Limits Applied to the AFA Facilities Within Each AFA Company

Individual processing limits for each species would be imposed upon all AFA companies. However, unlike the previous option, only the AFA-eligible facilities within each company would be included. Once the company's limit for a species is reached, no additional processing of the limited species by any of the company's facilities participating in pollock cooperatives would be allowed. Although the processing limits do not constitute an allocation, each AFA company could determine how its own limit might be divided among its participating facilities. The analysis of individual-company processing limits on participating facilities uses the same assumptions that define the previous option. As with previous options, a decision has to be made as to whether the limit would apply when a company (or any of its AFA-eligible facilities) does not join a co-op. Each company would likely need to declare each year whether any of its facilities would be in a co-op.

Tables 8.21-8.26 show estimates of individual processing limits imposed on the AFA facilities that are participating in cooperatives within a company for each species group for the two time periods. Actual company identities have been hidden for reasons of confidentiality.

Table 8.21 Option 8: Individual Company Limits Applied to AFA Facilities for Bering Sea Aleutian Islands Groundfish, 1995-1997

Company Number	**Percent of Total Processing**				
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Rockfish**
Company 1	0.01	0.07	0.14	0.95	0.15
Company 2	0	0.12	0.66	1.14	0.20
Company 3	10.86	12.26	5.43	7.32	5.51
Company 4	0	0.21	0.51	1.01	0.21
Company 5	1.77	0.02	0.65	0.12	0.09
Company 6	0	0.25	0.69	2.24	1.15
Company 7	0.83	2.10	1.62	1.91	3.03
Company 8	-	6.08	0.82	0.39	1.17
Company 9	0	0.07	0.10	0.12	0.07
Company 10	0.02	0.50	2.66	3.82	0.85
Company 11	0.01	0.21	0.97	2.98	0.49
Company 12	0	0.56	0.35	0.88	0.57
Company 13	0.03	1.97	1.61	3.21	0.89
Company 14	0.06	0.72	3.18	7.78	2.57
Company 15	0.03	3.93	2.75	3.76	1.35
Company 16	0	4.48	0.64	0.32	0.94
Total	13.64	33.57	22.78	37.95	19.23

Table 8.22 Option 8: Individual Company Limits Applied to AFA Facilities for Gulf of Alaska Groundfish, 1995-1997

	Percent of Total Processing					
Company Number	**Atka Mackerel**	**Flat fish**	**Other Species**	**Pacific Cod**	**Pollock**	**Rockfish**
Company 1	-	0.27	0.01	0.01	0.23	0.05
Company 2	-	-	-	-	-	-
Company 3	0.19	5.41	0.67	1.70	0.70	2.98
Company 4	-	0	0	0	0.11	-
Company 5	-	-	-	-	-	-
Company 6	0	0.02	0.01	0.20	1.70	0
Company 7	0.41	0.22	0.36	0.65	0.49	5.23
Company 8	-	-	-	-	-	-
Company 9	-	0	-	0	0.02	-
Company 10	3.78	0.06	0.52	0.35	4.88	0.05
Company 11	0.96	0.67	1.18	12.21	5.69	0.22
Company 12	-	0	-	0.01	0.08	-
Company 13	4.57	0.06	0.24	0.38	2.30	0.03
Company 14	1.33	1.10	1.26	15.75	27.94	0.64
Company 15	2.98	0.06	0.33	0.56	3.26	0.04
Company 16	-	0	-	0	0.04	-
Total	**14.23**	**7.88**	**4.58**	**31.83**	**47.45**	**9.25**

Table 8.23 Option 8: Individual Company Limits Applied to AFA Facilities for Crab, 1995-1997

Company Number	Percent of Total Processing				
	Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**
Company 1	-	-	-	-	-
Company 2	-	-	-	-	-
Company 3	-	-	-	0.07	0
Company 4	-	-	-	-	1.23
Company 5	-	-	-	-	-
Company 6	-	-	-	-	-
Company 7	-	-	-	-	-
Company 8	-	-	-	-	-
Company 9	-	-	-	-	-
Company 10	7.59	6.96	30.63	5.82	8.10
Company 11	14.06	2.15	0	5.07	13.05
Company 12	-	-	-	-	-
Company 13	6.03	4.92	16.75	3.36	7.50
Company 14	16.65	2.92	0.67	2.24	14.09
Company 15	12.14	1.68	7.72	2.55	12.45
Company 16	-	-	-	-	-
Total	56.47	18.63	55.77	19.10	56.44

Table 8.24 Option 8: Individual Company Limits Applied to AFA Facilities for Bering Sea Aleutian Islands Groundfish, 1996 and 1997

Company Number	Percent of Total Processing				
	Atka Mackerel	Flatfish	Other Species	Pacific Cod	Rockfish
Company 1	0.01	0.07	0.16	1.14	0.16
Company 2	0	0.13	0.59	1.44	0.24
Company 3	10.23	12.34	5.18	7.02	5.22
Company 4	0	0.16	0.44	1.00	0.22
Company 5	2.11	0.02	0.86	0.13	0.11
Company 6	0.01	0.25	0.86	2.33	1.12
Company 7	0.56	2.02	1.68	2.03	2.06
Company 8	-	6.34	0.73	0.39	1.49
Company 9	0	0.09	0.12	0.13	0.05
Company 10	0.02	0.41	2.49	3.58	0.62
Company 11	0.01	0.22	1.01	3.14	0.48
Company 12	0	0.33	0.49	1.17	0.83
Company 13	0.02	1.85	1.52	2.61	0.75
Company 14	0.03	0.87	3.85	8.64	2.70
Company 15	0.03	4.12	2.92	3.72	1.50
Company 16	0	4.50	0.57	0.29	1.19
Total	13.04	33.73	23.48	38.75	18.75

Table 8.25 Option 8: Individual Company Limits Applied to AFA Facilities for Gulf of Alaska Groundfish, 1996 and 1997

	Percent of Total Processing					
Company Number	**Atka Mackerel**	**Flat fish**	**Other Species**	**Pacific Cod**	**Pollock**	**Rockfish**
Company 1	-	0.38	0.02	0.02	0.08	0.08
Company 2	-	-	-	-	-	-
Company 3	0.26	4.19	0.39	2.34	0.75	0.35
Company 4	-	0	0	0	0.05	-
Company 5	-	-	-	-	-	-
Company 6	0	0.01	0.01	0.13	2.14	0
Company 7	0.03	0.14	0.49	0.33	0.61	6.45
Company 8	-	-	-	-	-	-
Company 9	-	0	-	0	0.02	-
Company 10	0.17	0.04	0.54	0.37	2.98	0.05
Company 11	0.09	0.68	1.09	13.68	6.26	0.25
Company 12	-	0	-	0.02	0.05	-
Company 13	5.43	0.04	0.08	0.11	1.76	0.01
Company 14	0.17	1.13	1.50	18.04	30.73	0.88
Company 15	3.79	0.05	0.43	0.51	1.23	0.04
Company 16	-	0	-	0	0.06	-
Total	**9.94**	**6.66**	**4.56**	**35.55**	**46.72**	**8.11**

Table 8.26 Option 8: Individual Company Limits Applied to AFA Facilities for Crab, 1996 and 1997

Company Number	Percent of Total Processing				
	Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**
Company 1	-	-	-	-	-
Company 2	-	-	-	-	-
Company 3	-	-	-	-	-
Company 4	-	-	-	-	-
Company 5	-	-	-	-	-
Company 6	-	-	-	-	-
Company 7	-	-	-	-	-
Company 8	-	-	-	-	-
Company 9	-	-	-	-	-
Company 10	6.75	6.75	28.20	6.55	8.21
Company 11	18.45	1.43	-	5.34	13.52
Company 12	-	-	-	-	-
Company 13	9.13	3.12	16.16	3.22	7.58
Company 14	13.09	2.80	1.04	1.68	14.76
Company 15	13.67	2.52	9.68	2.91	13.35
Company 16	-	-	-	-	-
Total	61.09	16.61	55.08	19.70	57.43

8.5.9 Option 9: Individual Processing Limits Applied to All AFA Companies

8.5.9 Individual Limits Applied to All Facilities within a Company

Individual processing limits would be imposed for each species upon each AFA company. The primary criterion under which two or more processing facilities are considered to be owned by a single company will be whether the majority of ownership in each facility is held by the same individuals or companies, regardless of whether each individual's or company's relative shares are identical. Once the company's limit for a species is reached, no additional processing of the limited species by any facility owned by that company would be allowed. Although the processing limits do not constitute an allocation, each AFA company could determine how its own limit might be divided among its processing facilities.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the individual company processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. However, other facilities included within AFA companies, will be allowed to process that company's processing history of crab and GOA groundfish species. (The 20 catcher processors listed in §208 of the AFA did not process any crab during the historical processing period.)

Tables 8.27–8.32 show estimates of individual processing limits for AFA company facilities for each species group for the two time periods. Actual company identities have been hidden for reasons of confidentiality.

Table 8.27 Option 9: Individual Company Limits Applied to All Company Facilities for Bering Sea Aleutian Islands Groundfish, 1995-1997

Company Number	**Percent of Total Processing**				
	Atka Mackerel	**Flatfish**	**Other Species**	**Pacific Cod**	**Rockfish**
Company 1	0.01	0.65	0.32	1.12	0.23
Company 2	-	6.08	0.82	0.39	1.17
Company 3	10.86	12.26	5.43	7.32	5.51
Company 4	0	0.30	2.23	2.40	0.23
Company 5	1.77	0.02	0.65	0.12	0.09
Company 6	0	0.25	0.69	2.24	1.15
Company 7	1.12	4.59	2.81	2.79	9.49
Company 8	0	0.12	0.66	1.14	0.20
Company 9	0	0.07	0.10	0.12	0.07
Company 10	0.02	0.50	2.66	3.82	0.85
Company 11	0.01	0.21	0.98	3.02	0.49
Company 12	0	0.56	0.35	0.88	0.57
Company 13	0.03	1.97	1.61	3.21	0.89
Company 14	0.06	0.82	3.38	9.52	2.77
Company 15	0.03	3.94	2.76	3.76	1.35
Company 16	0	4.48	0.64	0.32	0.94
Total	**13.93**	**36.82**	**26.09**	**42.19**	**25.99**

Table 8.28 Option 9: Individual Company Limits Applied to All Company Facilities for Gulf of Alaska Groundfish, 1995-1997

	Percent of Total Processing					
Company Number	**Atka Mackerel**	**Flatfish**	**Other Species**	**Pacific Cod**	**Pollock**	**Rockfish**
Company 1	-	0.27	0.01	0.02	0.23	0.05
Company 2	-	-	-	-	-	-
Company 3	0.19	5.41	0.67	1.70	0.70	2.98
Company 4	-	0	0	0.03	0.11	-
Company 5	-	-	-	-	-	-
Company 6	0	0.02	0.01	0.20	1.70	0
Company 7	2.97	14.18	4.04	11.08	11.29	20.98
Company 8	-	-	-	-	-	-
Company 9	-	0	-	0	0.02	-
Company 10	3.78	0.06	0.52	0.35	4.88	0.05
Company 11	0.96	0.68	1.37	13.24	5.70	0.24
Company 12	-	0	-	0.01	0.08	-
Company 13	4.57	0.06	0.24	0.38	2.30	0.03
Company 14	1.40	1.12	1.27	16.74	27.96	0.65
Company 15	2.98	0.06	0.33	0.56	3.26	0.04
Company 16	-	0	-	0	0.04	-
Total	**16.86**	**21.87**	**8.48**	**44.31**	**58.27**	**25.03**

Table 8.29 Option 9: Individual Company Limits Applied to All Company Facilities for Crab, 1995-1997

Company Number	**Percent of Total Processing**				
	Bairdi	**Blue King**	**Brown King**	**Opilio**	**Red King**
Company 1	4.06	-	-	6.33	1.38
Company 2	-	2.79	3.56	0.72	-
Company 3	-	-	-	0.07	-
Company 4	-	-	-	-	1.23
Company 5	-	-	-	-	-
Company 6	-	-	-	-	-
Company 7	2.18	-	-	2.30	0.39
Company 8	-	-	-	-	-
Company 9	-	-	-	-	-
Company 10	7.59	6.96	30.63	5.82	8.10
Company 11	14.06	21.21	-	14.38	16.09
Company 12	-	-	-	-	-
Company 13	6.03	4.92	16.75	3.36	7.50
Company 14	16.95	28.89	1.19	19.73	20.59
Company 15	14.27	9.27	7.80	8.96	14.09
Company 16	-	-	-	-	-
Total	65.15	74.05	59.93	61.67	69.37

Table 8.30 Option 9: Individual Company Limits Applied to All Company Facilities for Bering Sea Aleutian Islands Groundfish, 1996 and 1997

Company Number	Percent of Total Processing				
	Atka Mackerel	Flatfish	Other Species	Pacific Cod	Rockfish
Company 1	0.01	0.07	0.23	1.36	0.17
Company 2	0	0.14	0.59	1.52	0.24
Company 3	10.23	12.34	5.18	7.02	5.22
Company 4	0	0.27	2.13	2.59	0.25
Company 5	2.11	0.02	0.86	0.13	0.11
Company 6	0.01	0.25	0.86	2.33	1.12
Company 7	0.70	3.85	2.76	2.63	7.79
Company 8	-	6.34	0.73	0.39	1.49
Company 9	0	0.09	0.12	0.13	0.05
Company 10	0.02	0.41	2.49	3.58	0.62
Company 11	0.01	0.22	1.02	3.21	0.48
Company 12	0	0.33	0.49	1.17	0.83
Company 13	0.02	1.85	1.52	2.61	0.75
Company 14	0.03	0.99	4.07	10.83	2.90
Company 15	0.03	4.12	2.94	3.72	1.50
Company 16	0	4.50	0.57	0.29	1.19
Total	13.17	35.79	26.56	43.50	24.72

Table 8.31 Option 9: Individual Company Limits Applied to All Company Facilities for Gulf of Alaska Groundfish, 1996 and 1997

Company Number	Percent of Total Processing					
	Atka Mackerel	Flat fish	Other Species	Pacific Cod	Pollock	Rock fish
Company 1	-	0.38	0.02	0.02	0.08	0.08
Company 2	-	-	-	-	-	-
Company 3	0.26	4.19	0.39	2.34	0.75	0.35
Company 4	-	0	0.01	0.05	0.05	-
Company 5	-	-	-	-	-	-
Company 6	0	0.01	0.01	0.13	2.14	0
Company 7	0.16	14.47	4.69	11.62	9.92	23.60
Company 8	-	-	-	-	-	-
Company 9	-	0	-	0	0.02	-
Company 10	0.17	0.04	0.54	0.37	2.98	0.05
Company 11	0.09	0.68	1.15	14.28	6.26	0.26
Company 12	-	0	-	0.02	0.05	-
Company 13	5.43	0.04	0.08	0.11	1.76	0.01
Company 14	0.17	1.13	1.50	18.67	30.73	0.88
Company 15	3.79	0.05	0.43	0.51	1.23	0.05
Company 16	-	0	-	0	0.06	-
Total	**10.07**	**21.00**	**8.82**	**48.11**	**56.04**	**25.27**

Table 8.32 Option 9: Individual Company Limits Applied to All Company Facilities for Crab, 1996 and 1997

Company Number	Percent of Total Processing				
	Bairdi	Blue King	Brown King	Opilio	Red King
Company 1	-	-	-	-	-
Company 2	-	-	-	-	-
Company 3	-	-	-	0.53	-
Company 4	9.13	3.12	16.16	3.22	7.58
Company 5	-	-	-	-	-
Company 6	-	-	-	-	-
Company 7	-	-	-	-	-
Company 8	-	-	-	-	0.77
Company 9	18.45	22.74	-	14.94	16.54
Company 10	-	-	-	-	-
Company 11	-	-	-	-	-
Company 12	13.09	29.53	1.65	19.13	20.48
Company 13	-	-	-	2.19	0.42
Company 14	13.67	12.37	9.78	9.30	14.55
Company 15	6.75	6.75	28.20	6.55	8.21
Company 16	-	-	-	6.77	1.48
Total	**61.09**	**74.52**	**55.79**	**62.64**	**70.04**

8.5.10 Option 10: Individual Processing Limits Applied to All AFA Entities

Individual processing limits are applied to each AFA entity for each species, as defined by the 10% Ownership Rule. Once the entity's limit for a species is reached, no additional processing of the limited species by any facility within the entity would be allowed. Although the processing limits do not constitute an allocation, each AFA entity could determine how its own limit might be divided among its processing facilities.

The GOA groundfish processing histories of the 20 catcher processors listed in §208 of the AFA are included in the individual entity processing limits. The AFA prohibits those 20 vessels from processing any BSAI crab, any pollock in the GOA, any groundfish in Area 630 of the GOA, and more than 10 percent of the Pacific cod in Areas 610, 620, and 640. However, other facilities included within AFA entities will be allowed to process the share crab and GOA groundfish species generated by the entity's catcher processors. (The 20 catcher processors listed in §208 of the AFA did not process any crab during the historical processing period.)

Tables 8.33-8.38 show estimates of individual processing limits for AFA entities for each species group for the two periods. The entities are based on the organizational analysis from Section 8.2, and therefore the estimates should be viewed as analytical estimates rather than final limits. The tables provide ranges of estimated limits for each species group. The lower values are derived from facilities that the analysts were able to document as part of an AFA entity and are shown in the rows labeled "documented". Higher estimates of the limits are shown in rows labeled "possible." The higher estimates were derived by adding to the documented totals, the processing volumes of other facilities that may be considered part of an AFA entity once final rules are determined and additional information and verification have been gathered.

Table 8.33 Option 10: Individual Limits Applied to All Facilities Within AFA Entities for Bering Sea Aleutian Island Groundfish, 1995-1997

Entity		Percent of Total Processing				
	AFA Links	Atka Mackerel	Flatfish	Other Species	Pacific Cod	Rockfish
Entity 1	documented	0	0.12	0.66	1.19	0.20
	possible	0	0.12	0.66	1.19	0.20
Entity 2	documented	0.06	3.09	4.99	7.41	2.84
	possible	0.06	3.09	4.99	7.41	2.84
Entity 3	documented	0.01	0.65	0.32	1.12	0.23
	possible	0.01	0.65	0.32	1.12	0.23
Entity 4	documented	10.86	13.32	6.37	8.64	6.15
	possible	11.93	28.87	14.31	11.57	21.96
Entity 5	documented	0	0.30	2.23	2.40	0.23
	possible	0	0.30	2.23	2.40	0.23
Entity 6	documented	1.77	0.02	0.65	0.12	0.09
	possible	1.77	0.02	0.65	0.12	0.09
Entity 7	documented	0.03	3.94	2.78	3.84	1.36
	possible	0.04	3.99	3.56	5.08	1.40
Entity 8	documented	0.01	0.21	0.98	3.02	0.49
	possible	0.01	0.21	0.98	3.02	0.49
Entity 9	documented	0	4.51	1.32	0.79	0.94
	possible	0	4.69	3.33	3.35	0.95
Entity 10	documented	0	0.25	0.69	2.24	1.15
	possible	0	0.25	0.69	2.24	1.15
Entity 11	documented	1.12	4.59	2.81	2.79	9.49
	possible	1.12	4.59	2.81	2.79	9.49
Entity 12	documented	0.06	0.82	3.38	9.52	2.77
	possible	0.06	0.82	3.38	9.52	2.77
Entity 13	documented	-	6.08	0.82	0.39	1.17
	possible	-	6.08	0.82	0.39	1.17
Entity 14	documented	0	0.56	0.35	0.88	0.57
	possible	0	0.56	0.35	0.88	0.57
Total Documented		**13.94**	**38.48**	**28.34**	**44.36**	**27.68**
Total Possible		**15.01**	**54.26**	**39.07**	**51.09**	**43.53**

Notes:

1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.

2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation.

Table 8.34 Option 10: Individual Limits Applied to All Facilities Within AFA Entities for Gulf of Alaska Groundfish, 1995-1997

Entity Number		Percent of Total Processing					
	AFA Links	Atka Mackerel	Flatfish	Other Species	Pacific Cod	Pollock	Rockfish
Entity 1	documented	-	-	-	-	-	-
	possible	-	-	-	-	-	-
Entity 2	documented	8.70	6.98	9.66	6.98	15.86	4.44
	possible	8.70	6.98	9.66	6.98	15.86	4.44
Entity 3	documented	-	0.27	0.01	0.02	0.23	0.05
	possible	-	0.27	0.01	0.02	0.23	0.05
Entity 4	documented	0.19	5.41	0.67	1.70	0.70	2.98
	possible	2.46	8.98	2.08	2.39	0.87	10.62
Entity 5	documented	-	0.00	0.00	0.03	0.11	-
	possible	-	0.00	0.00	0.03	0.11	-
Entity 6	documented	-	-	-	-	-	-
	possible	-	-	-	-	-	-
Entity 7	documented	2.98	0.06	0.33	0.56	3.26	0.04
	possible	2.98	0.10	1.09	0.57	3.26	0.15
Entity 8	documented	0.96	0.68	1.37	13.24	5.70	0.24
	possible	0.96	0.68	1.37	13.24	5.70	0.24
Entity 9	documented	-	0.00	0.02	0.00	0.04	0.00
	possible	-	0.03	1.38	0.00	0.04	0.07
Entity 10	documented	0.00	0.02	0.01	0.20	1.70	0.00
	possible	0.00	0.02	0.01	0.20	1.70	0.00
Entity 11	documented	2.97	14.18	4.04	11.08	11.29	20.98
	possible	2.97	14.18	4.04	11.08	11.29	20.98
Entity 12	documented	1.40	1.12	1.27	16.74	27.96	0.65
	possible	1.40	1.12	1.27	16.74	27.96	0.65
Entity 13	documented	-	-	-	-	-	-
	possible	-	-	-	-	-	-
Entity 14	documented	-	0.00	-	0.01	0.08	-
	possible	-	0.00	-	0.01	0.08	-
Total Documented		**17.21**	**28.72**	**17.40**	**50.56**	**66.93**	**29.39**
Total Possible		**19.48**	**32.37**	**20.93**	**51.27**	**67.10**	**37.20**

Notes:

1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.

2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation.

Table 8.35 Option 10: Individual Limits Applied to All Facilities Within AFA Entities for Crab, 1995-1997

Entity		Percent of Total Processing				
	AFA Links	Bairdi	Blue King	Brown King	Opilio	Red King
Entity 1	documented	-	2.79	3.56	0.72	-
	possible	-	2.79	3.56	0.72	-
Entity 2	documented	13.85	11.88	47.38	9.18	15.60
	possible	13.85	11.88	47.38	9.18	15.60
Entity 3	documented	4.06	-	-	6.33	1.38
	possible	4.06	-	-	6.33	1.38
Entity 4	documented	-	-	-	0.07	-
	possible	-	-	-	0.07	-
Entity 5	documented	-	-	-	-	1.23
	possible	-	-	-	-	1.23
Entity 6	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 7	documented	14.27	9.27	7.80	8.96	14.09
	possible	15.79	9.79	7.80	10.60	14.91
Entity 8	documented	14.06	21.21	-	14.38	16.09
	possible	14.06	21.21	-	14.38	16.09
Entity 9	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 10	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 11	documented	2.18	-	-	2.30	0.39
	possible	2.18	-	-	2.30	0.39
Entity 12	documented	16.95	28.89	1.19	19.73	20.59
	possible	16.95	28.89	1.19	19.73	20.59
Entity 13	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 14	documented	-	-	-	-	-
	possible	-	-	-	-	-
Total Documented		**65.38**	**74.05**	**59.93**	**61.67**	**69.37**
Total Possible		**66.90**	**74.56**	**59.93**	**63.31**	**70.20**

Notes:

1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.

2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation

Table 8.36 Option 10: Individual Limits Applied to All Facilities Within AFA Entities for Bering Sea Aleutian Island Groundfish, 1996 and 1997

Entity		Percent of Total Processing				
	AFA Links	Atka Mackerel	Flatfish	Other Species	Pacific Cod	Rockfish
Entity 1	documented	0	0.14	0.59	1.52	0.24
	possible	0	0.14	0.59	1.52	0.24
Entity 2	documented	0.04	2.46	4.58	6.42	1.58
	possible	0.04	2.46	4.58	6.42	1.58
Entity 3	documented	0.01	0.07	0.23	1.36	0.17
	possible	0.01	0.07	0.23	1.36	0.17
Entity 4	documented	10.23	12.38	5.85	7.15	5.30
	possible	10.97	28.73	14.50	10.03	21.42
Entity 5	documented	0	0.27	2.13	2.59	0.25
	possible	0	0.27	2.13	2.59	0.25
Entity 6	documented	2.11	0.02	0.86	0.13	0.11
	possible	2.11	0.02	0.86	0.13	0.11
Entity 7	documented	0.03	4.13	2.97	3.84	1.52
	possible	0.04	4.17	3.87	5.21	1.56
Entity 8	documented	0.01	0.22	1.02	3.21	0.48
	possible	0.01	0.22	1.02	3.21	0.48
Entity 9	documented	0	4.50	0.59	0.34	1.19
	possible	0	4.67	2.54	2.80	1.20
Entity 10	documented	0.01	0.25	0.86	2.33	1.12
	possible	0.01	0.25	0.86	2.33	1.12
Entity 11	documented	0.70	3.85	2.76	2.63	7.79
	possible	0.70	3.85	2.76	2.63	7.79
Entity 12	documented	0.03	0.99	4.07	10.83	2.90
	possible	0.03	0.99	4.07	10.83	2.90
Entity 13	documented	-	6.34	0.73	0.39	1.49
	possible	-	6.34	0.73	0.39	1.49
Entity 14	documented	0	0.33	0.49	1.17	0.83
	possible	0	0.33	0.49	1.17	0.83
Total Documented		**13.18**	**35.95**	**27.73**	**43.91**	**24.97**
Total Possible		**13.92**	**52.51**	**39.24**	**50.61**	**41.15**

Notes:

1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.

2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation

Table 8.37 Option 10: Individual Limits Applied to All Facilities Within AFA Entities for Gulf of Alaska Groundfish, 1996 and 1997

Entity		Percent of Total Processing					
	AFA Links	Atka Mackerel	Flatfish	Other Species	Pacific Cod	Pollock	Rockfish
Entity 1	documented	-	-	-	-	-	-
	possible	-	-	-	-	-	-
Entity 2	documented	5.66	8.43	10.99	6.86	14.17	5.96
	possible	5.66	8.43	10.99	6.86	14.17	5.96
Entity 3	documented	-	0.38	0.02	0.02	0.08	0.08
	possible	-	0.38	0.02	0.02	0.08	0.08
Entity 4	documented	0.26	4.19	0.39	2.34	0.75	0.35
	possible	1.49	7.02	1.55	2.57	0.89	8.42
Entity 5	documented	-	0	0.01	0.05	0.05	-
	possible	-	0	0.01	0.05	0.05	-
Entity 6	documented	-	-	-	-	-	-
	possible	-	-	-	-	-	-
Entity 7	documented	3.79	0.05	0.43	0.51	1.23	0.05
	possible	3.79	0.06	0.98	0.51	1.23	0.12
Entity 8	documented	0.09	0.68	1.15	14.28	6.26	0.26
	possible	0.09	0.68	1.15	14.28	6.26	0.26
Entity 9	documented	-	0	-	0	0.06	-
	possible	-	0.04	2.00	0	0.06	0.10
Entity 10	documented	0	0.01	0.01	0.13	2.14	0
	possible	0	0.01	0.01	0.13	2.14	0
Entity 11	documented	0.16	14.47	4.69	11.62	9.92	23.60
	possible	0.16	14.47	4.69	11.62	9.92	23.60
Entity 12	documented	0.17	1.13	1.50	18.67	30.73	0.88
	possible	0.17	1.13	1.50	18.67	30.73	0.88
Entity 13	documented	-	-	-	-	-	-
	possible	-	-	-	-	-	-
Entity 14	documented	-	0	-	0.02	0.05	-
	possible	-	0	-	0.02	0.05	-
Total Documented		**10.13**	**29.35**	**19.19**	**54.49**	**65.44**	**31.17**
Total Possible		**11.36**	**32.23**	**22.90**	**54.72**	**65.57**	**39.41**

Notes:

1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.

2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation.

Table 8.38 Option 10: Individual Limits Applied to All Facilities Within AFA Entities for Crab, 1996 and 1997

Entity		Percent of Total Processing				
	AFA Links	Bairdi	Blue King	Brown King	Opilio	Red King
Entity 1	documented	-	-	-	0.53	-
	possible	-	-	-	0.53	-
Entity 2	documented	16.62	9.87	44.36	9.77	15.80
	possible	16.62	9.87	44.36	9.77	15.80
Entity 3	documented	-	-	-	6.77	1.48
	possible	-	-	-	6.77	1.48
Entity 4	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 5	documented	-	-	-	-	0.77
	possible	-	-	-	-	0.77
Entity 6	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 7	documented	13.67	12.37	9.78	9.30	14.55
	possible	14.23	12.76	9.78	11.07	15.44
Entity 8	documented	18.45	22.74	-	14.94	16.54
	possible	18.45	22.74	-	14.94	16.54
Entity 9	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 10	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 11	documented	-	-	-	2.19	0.42
	possible	-	-	-	2.19	0.42
Entity 12	documented	13.09	29.53	1.65	19.13	20.48
	possible	13.09	29.53	1.65	19.13	20.48
Entity 13	documented	-	-	-	-	-
	possible	-	-	-	-	-
Entity 14	documented	-	-	-	-	-
	possible	-	-	-	-	-
Total Documented		**61.83**	**74.52**	**55.79**	**62.64**	**70.04**
Total Possible		**62.40**	**74.90**	**55.79**	**64.41**	**70.92**

Notes:
1/ Total documented percentages include facilities for which the analysis has documented linkages at the 10 percent level.
2/ Total possible percentages include all documented linkages as well as facilities that may be linked, depending on the application of the 10 percent rule or further investigation.

8.6 Summary and Conclusions

The subsections that follow summarize the findings of the analysis and offer conclusions regarding the imposition of processing limits on AFA processors. The overall conclusions about effectiveness of the 10 options in meeting the objectives are shown in Table 8.39 (the same as Table 8.5 introduced in Section 8.5.1). First, effectiveness of the levels at which the processing limits are imposed (overall limits, sector limits, or individual limits) is considered, followed by a comparison of effectiveness brought about by defining AFA processors at the facility, company, or entity level. Then some observations are presented regarding the interpretation of the 10% Ownership Rule. The final subsection provides a more generalized summary and conclusion from the analysis of processing limits.

Table 8.39 Summary of the Qualitative Analysis of Processing Limits

	Overall Limits			Sector Limits			Individual Limits			
	Option 1 Facility	**Option 2 Company**	**Option 3 Entity**	**Option 4 Facility**	**Option 5 Company**	**Option 6 Entity**	**Option 7 Facility**	**Option 8 Company**	**Option 9 AFA/Co.**	**Option 10 Entity**
Objectives from the Perspective of Proponents of Processing Limits										
1. How does the option rate in terms of limiting AFA processing of species other than BSAI pollock to the levels achieved prior to the passage of the AFA?	Poor	Fair	Good	Poor	Fair	Good	Poor	Fair	Poor	Good
2. How does the option rate in terms of including all processing interests of AFA companies?	Poor	Fair	Good	Poor	Fair	Good	Poor	Fair	Poor	Good
3. How does the option rate in terms of preventing AFA companies from evading the limits through subsidiaries or holding companies?	Poor	Fair	Good	Poor	Fair	Good	Poor	Fair	Poor	Good
Objectives from the Perspective of AFA Processors										
4. How does the option rate in terms of allowing AFA processors to maximize their ability to realize profits in the pollock processing industry?	Good	Good	Good	Good	Good	Good	Poor	Good	Good	Good
5. How does the option rate in terms of allowing AFA processors to be able to utilize non-pollock processing capacity improvements completed prior to passage of the AFA?	Fair	Fair	Poor	Fair	Poor	Poor	Fair	Fair	Good	Fair
6. How does the option rate in terms of its effect on the market value of AFA facilities?	Good	Fair	Poor	Fair	Fair	Poor	Good	Fair	Good	Poor
Objectives from the Perspective of Non-pollock Processors Linked to AFA Processors										
7. How does the option rate in terms of restricting non-pollock processors that will not benefit directly from the AFA?	Good	Good	Poor	Good	Good	Poor	Good	Good	Good	Poor
Objectives from the Perspective of NMFS										
8. How does the option rate in terms of the Paperwork Reduction Act?	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Good	Poor
9. How does the option rate in terms of the NMFS ability to determine and set the limits?	Good	Fair	Poor	Good	Fair	Poor	Good	Fair	Good	Poor
10. How does the option rate in terms of the NMFS ability to manage the limits in-season?	Good	Fair	Fair	Good	Poor	Poor	Fair	Fair	Fair	Fair

Notes:

1/ The objectives are given a presumed rating relative to the other options from the perspective of the interest group shown. A fair rating implies that there are worse options and better options.

2/ The column headed "AFA/Co." is for the option that imposes individual processing limits on the AFA facilities in a company, but does not limit non-AFA facilities in the company.

8.6.1 Effectiveness of Limits: A Comparison of Overall, Sector, and Individual Limits

Processor caps were included in the AFA to help protect the market share of the non-AFA processors. While the AFA was being drafted, non-AFA processors expressed concerns that processors with the exclusive rights to process pollock could use profits from that fishery to increase their market share in other fisheries. The non-AFA processors would then be disadvantaged because they would be operating in a market that had a one way gate. AFA processors could increase their market share of crab, for example, but the non-AFA processors could not process any pollock from the directed fishery.

From the perspective of non-AFA processors, there do not appear to be significant differences if the processing limits are implemented as overall limits, sector limits, or individual limits. However, the level at which the limits are applied will make a significant difference to AFA processors and to NMFS.

If overall or sector-level limits are imposed, AFA processors will continue to compete against other AFA processors to attract fishermen to deliver crab and groundfish other than BSAI pollock. AFA processors will compete against other AFA processors to get their share of inputs (raw fish) before the AFA limit is reached, and will also need to compete against all non-AFA processors, who will not be restricted in any way except that they are precluded from processing pollock. Individual processing limits may reduce price competition among AFA processors. Although individual limits will not constitute an allocation and individual AFA processors will face continued competition from non-AFA processors, AFA processors will not need to compete with other AFA processors. Non-AFA processors would still be allowed to erode the AFA processor's share of these fisheries. So from a harvestors perspective, for the most part there is still a competitive market for their fish, even if the caps are set at the plant level. The harvestors may expericence difficulties making deliveries towards the end of the year if several of the AFA processors reach their individual cap and can no longer accept deliveries from catcher vessels. This will reduce marketing oportunuties for catcher vessels and may lead to lower prices, all other things being equal.

In general, individual processing limits will allow AFA processors more flexibility than with overall or sector-level limits to allocate their processing capacities and other resources, and allow them to realize more of the potential benefits of the AFA, within their historical processing shares. It should be noted however, that individual processing limits implemented at the AFA facility level could be less than optimal for AFA companies that have multiple AFA processing facilities. In such cases, AFA companies may not be able to achieve the same level of processing efficiency that might be possible if individual limits are imposed at the company level.

Annual implementation and in-season enforcement of overall processing limits appear to be less burdensome to NMFS than sector-level or individual-level limits. With overall or sector level processing limits, it is likely that NMFS will have to enforce at least two types of closures in order to enforce the processing limits and to still allow the processing of limited species as bycatch. The two types of closure would be:

1 A directed processing closure when the AFA processing total reaches a pre-determined percentage of the processing limits. A closure of directed processing will allow AFA processors to retain and process limited species when they are delivered as bycatch.

2. A closure to all processing when the full processing limit is reached.

If processing limits are imposed at the sector level, NMFS may have the additional burden of determining which processing facilities belong to which sector. This additional burden will occur if sector-level limits are

imposed on AFA companies or on AFA entities. If sector-level limits are imposed only on AFA-eligible facilities, then the sector definitions are predetermined.

If processing limits are imposed on individual processors, NMFS may be able to shift some of the monitoring burden onto the processors themselves. In such cases NMFS could report weekly cumulative processing totals to the processors, but the processors themselves would have the responsibility of determining when they should cease processing for directed fisheries. Under this scenario it may be possible to make enforcement a post-season process involving fines and sanctions for those processors that exceed their limits.

In conclusion, it appears that if processing limits are imposed, relative to other options, individual processing limits offer as much protection to non-AFA processors and may not be any more costly to implement and enforce. Individual processing limits may also allow AFA processors to realize more of the benefits of the AFA (by reducing market share competition amoung AFA processors). However, they would still be competeing in the market place with non-AFA processors to attact catcher vessels to deliver their non-pollock fish to them. This would help ensure they would continue paying the market price in most cases. Yet, as AFA processors reach their caps they will no longer be allowed to purchase fish. This will reduce the number of processors available to purchase fish from catcher vessels. If enough processors leave the market in an area, it could reduce the ex-vessel price paid to vessel owners, or increase the cost of delivering fish by forcing them to seek markets further from the fishing grounds.

8.6.2 Effectiveness of Limits: Comparisons of AFA Entities, AFA Companies, and AFA Facilities

Processing limits applied to AFA facilities will be restrictive, but less restrictive than limits applied to companies or entities. If processing limits are applied to facilities, either as a group or individually, AFA participating cooperatives would not be able to increase their shares of processing of crab and groundfish species under the jurisdiction of the NPFMC. AFA facilities would, however, be able to increase their relative processing shares of species managed solely by the State of Alaska, such as salmon, herring, and other shellfish. Additionally, limiting the processing of AFA facilities would not constrain the ability of the owners of the facilities to use AFA profits to increase their non-pollock processing shares at other facilities in which the AFA owners may have an interest.

Processing limits applied to AFA companies rather than to AFA facilities will be more effective in limiting the ability of owners of AFA facilities to increase their shares of non-pollock processing. The effectiveness of processing limits on AFA companies depends largely on the ability to define AFA companies. The analysis defines AFA companies on a conceptual basis that combines all of the processing facilities that have roughly the same ownership structure. Under this definition, non-AFA facilities owned by AFA companies or by subsidiaries of AFA companies are included in the processing limits. Thus if an AFA owner wishes to increase its shares of crab or groundfish other than BSAI pollock, it would have to do so as a minority partner. The processing limits would not place a constraint on AFA companies wishing to increase their processing shares of halibut or of species managed solely by the State of Alaska, such as salmon, herring, and other shellfish.

Processing limits applied to AFA entities as defined by the 10% Ownership Rule would appear to be more effective than limits imposed on AFA companies. With the 10% Ownership Rule it will be much more difficult for AFA owners to use profits resulting from the AFA to invest in greater processing capacity. If AFA owners wish to make new capital investments in non-pollock processing, they could make investments in salmon and herring fisheries or make investments at levels less than 10 percent of the capital value of the processors in which they are investing. In addition, because of the limits AFA processors would bring, existing owners may not welcome new investment associated with AFA profits.

Imposing processing limits on AFA entities will have some unintended and perhaps draconian consequences. Processing limits imposed on AFA entities will create significantly more paperwork for NMFS and the processing industry than the other options. This additional burden will be time-consuming and expensive, and may be viewed by many as a significant intrusion of government into private affairs of industry. Additionally, if limits are imposed on AFA entities, AFA owners will be prevented from investments in crab and groundfish processing capacity, and may choose instead to invest in additional processing capacity in species that are not limited, such as salmon, herring and halibut. Additional competition for the same processors that are calling for the limits could result.

Imposing processing limits on entities will also create other unintended consequences by limiting the activities of processors that may not be able to experience any of the benefits of the AFA. These consequences are perhaps most easily understood by using ownership interests of the Bristol Bay Economic Development Corporation as an example. As was shown Figure 8.14 in Section 8.2.5, BBEDC has a 20 percent ownership interest in the *Arctic Fjord*, an AFA catcher processor. BBEDC also has a 50 percent interest in the *Bristol Leader*, a factory longliner. Partners of Alaskan Leader Fisheries, which owns 2 other non-AFA processing facilities, own the remaining 50 percent of the Bristol Leader. Under the 10% Ownership Rule it is likely that the *Bristol Leader* and the two processing facilities owned by Alaskan Leader Fisheries would be included as part of an AFA entity and therefore be constrained by the processing limits. Furthermore, there do not appear to be any other linkages between the *Arctic Fjord* and the *Bristol Leader* or Alaskan Leader Fisheries.

The lack of a direct connection between the majority owners of the *Arctic Fjord* and the managing partners of the *Bristol Monarch* and Alaskan Leader Fisheries makes it unlikely that the *Bristol Leader* and Alaskan Leader Fisheries will realize higher processing shares of crab and groundfish in the North Pacific as a result of the AFA. Therefore, it could be argued that the *Bristol Leader* and Alaskan Leader Fisheries should not be included in the processing limits. On the other hand, it is certainly feasible that BBEDC could invest its pollock profits into additional processing capacity of the *Bristol Leader*, into the other processing facilities owned by Alaskan Leader Fisheries, or into any other processing facility. These new investments could result in higher processing shares of crab and groundfish other than pollock for the *Bristol Monarch*, Alaskan Leader Fisheries, or other BBEDC interests.

Thus it appears that although while the use of the 10% Ownership Rule in the application of processing limits will provide additional protection to processors that have no links or minor links to AFA owners, it may restrict and potentially harm other processors that are unlikely to actually benefit from the AFA. In addition, limits on AFA entities could lead to increased investments in salmon and herring processing. Finally, the paperwork and enforcement if limits are applied to AFA entities will be more burdensome and expensive for both NMFS and the industry. Therefore, it is uncertain whether the additional protection gained by applying processing limits to AFA entities outweighs the negative impacts.

Given the possibility of ambiguous results if processing limits are applied to AFA entities, the Council may wish instead to approve a less restrictive option in order to fulfill its mandate to protect processors not eligible to participate in the directed pollock fishery in the BSAI, or examine other options for defining AFA entities.

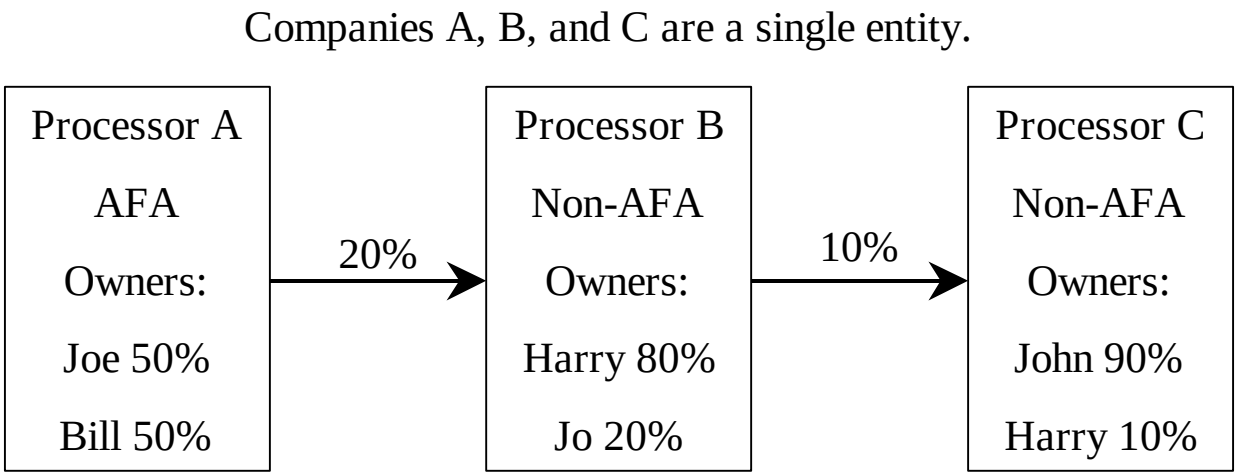
8.6.3 Alternative Interpretations of the 10% Ownership Rule

This subsection reexamines the literal interpretation of the 10% Ownership Rule as used in the analysis of processing limits and suggests alternative ways in which the 10% Ownership Rule could be applied if the Council chooses.

Although the 10% Ownership Rule was developed from language contained in the AFA, the Council has determined that Congress has given it the authority to adapt the language in the AFA to address its mandates. Therefore, the Council has the authority to interpret or adapt the 10% Ownership Rule as necessary to achieve the objectives for which the processing limits were proposed.

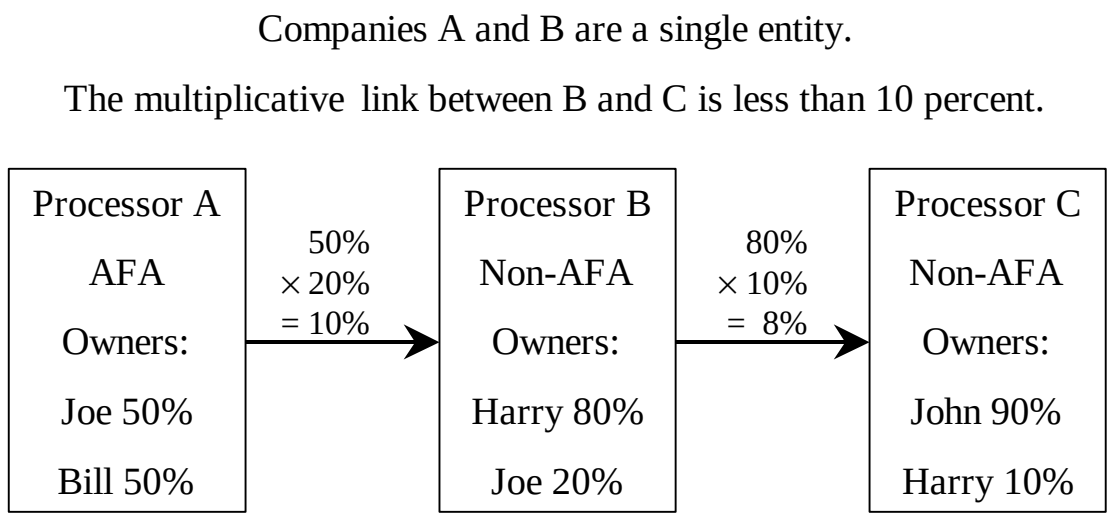
To date the 10% Ownership Rule has been interpreted in it simplest and most literal form, which considers processors to be linked if there is at least a 10 percent ownership connection, regardless of how that connection is developed. Figure 8.19 illustrates the literal interpretation of the 10% Ownership Rule. In the figure, Joe owns 50 percent of Processor A and 20 percent of Processor B, so Processor A and B are linked through Joe's 20 percent ownership in Processor B. Similarly, Processor B and Processor C are linked through Harry, with his 80 percent interest in Processor B and 10 percent interest in Processor C. Because A is linked to B and B is linked to C, all three processors are defined as a single entity.

Figure 8.19 Literal Interpretation of the 10% Ownership Rule



Another way to interpret the 10% Ownership Rule would use a multiplicative measure of ownership. In this case the shares of the common owners are multiplied together. Figure 8.20 shows how the situation from Figure 8.19 would be interpreted under a multiplicative interpretation. Joe's ownership share in Processor A is multiplied by Joe's share in Processor B. If the result is greater than 10 percent, then the Processor A is linked to Processor B. This interpretation measures the percentage of AFA interest in affiliated processors. In this case it can be said that Processor A has a 10 percent ownership interest in Processor B. The link between Processor B and Processor C has different implications. Even though Harry owns 10 percent of Processor C, the Processor B as a whole owns only 8 percent of Processor C. In this interpretation of the 10% Ownership Rule, Processor B is not linked to Processor C. An additional advantage of the multiplicative interpretation of the 10% Ownership Rule is that it provides a means by which to measure linkages that involve partnerships or more than one person.

Figure 8.20 Multiplicative Interpretation of the 10% Ownership Rule



It is also possible to interpret the 10% Ownership Rule as implying that the direct AFA interest in a processor must exceed 10 percent in order for 2 processors to be considered linked. In other words, the link must involve an owner of an AFA facility. Under this interpretation, Processors A and B would be linked in either the literal interpretation or the multiplicative interpretation of the 10% Ownership Rule, but Processor C would not be linked to the entity because Processor C has no direct AFA ownership.

Regardless of the interpretation of the 10% Ownership Rule, there still may be unintended consequences of its application. Analyzing and documenting these impacts is not possible, however, an example of these impacts is provided. Assume that the relationship between Harry and Joe began in 1990 when Processor B was constructed, and that Joe and Bill purchased Processor A in 1995. After Joe became involved with Bill in Processor A, he relinquished all management of Processor B to Harry. If processing limits are applied using the 10% Ownership Rule, Processor B will be limited, even though Harry, the managing partner and majority owner, has no interactions with Joe, except when he signs the check to Joe for 20 percent of the annual profit.

That is not to say that Processor B cannot benefit from AFA through Joe. If, for example, Joe invests some of his additional profits in Processor B to add a new crab line, then Processor B will be able to expand its percentage of crab processing as a result of Joe's participation in pollock cooperatives. However, absent any additional investment, any increases in processing shares that Processor B may be able to achieve cannot be directly linked to AFA.

Based on the discussion in this section it may be possible to craft an alternative means to restrict processors associated with the AFA facilities from increasing their shares of crab and groundfish species as a result of profits associated with AFA, without placing overly restrictive limits on processors that are only indirectly linked to the AFA. Although Chapter 8 does not specifically address any other definitions of the 10% Ownership Rule, there may be sufficient information in the analysis of the organization of the processing industry in Section 8.2 to allow the Council to develop a preferred alternative based on one of these alternative interpretations.

8.7 Overall Conclusions

The AFA instructs the Council to examine alternatives that would protect processors that will not be able to participate in pollock cooperatives from adverse effects resulting from the AFA. This chapter has examined the concept of imposing limits on the amounts of crab and groundfish other than pollock that AFA processors can process, as a means of protecting non-AFA processors.

Application of economic theory leads to the conclusion that pollock processors may be able to generate higher-than-expected profits from pollock processing because of the AFA. AFA processors may choose to reinvest those higher than expected returns into the processing of other species if it appears that returns from additional investment in processing of crab, groundfish, and other species will provide better returns than investments outside of fish processing. Because many other opportunities for investment exist, the stock market, for example, it is not certain that pollock processors will invest additional amounts into the processing of crab and other groundfish. If the processors do choose to invest in additional processing capacity, then it is likely they will be able to increase their share of the processing of other species.

It does not appear that any of the options that have been analyzed will fully address the concerns of the non-AFA processors without placing potentially harsh restrictions on processors that do not appear to be able to benefit directly from the AFA, and without imposing burdensome paperwork and enforcement costs on NMFS

and on the industry as a whole. This conclusion applies whether the processing limits are overall limits, sector limits or individual limits.

If the Council chooses to fulfill its mandate to protect non-AFA processors by imposing processing limits on crab and groundfish other than pollock, it appears that establishing limits on individual AFA companies will provide a relatively high level of protection with relatively few negative impacts.

9.0 ALTERNATIVES FOR THE IMPLEMENTATION AND MONITORING OF INSHORE COOPERATIVES

Under the AFA, the management of inshore and offshore cooperatives would differ significantly. The fishery cooperative formed by C/Ps and associated catcher vessels operate under a single offshore pollock TAC that may be apportioned among participants in the cooperative without intervention by NMFS. Under the AFA, any cooperative formed by listed motherships and associated catcher vessels could be formed and operate similarly. Because pollock TAC allocations remain at the sector level and are not sub-allocated to specific processors, management of the co-ops need differ little from traditional open access management of the pollock fishery.

However, management of the inshore co-ops authorized by the AFA pose a significantly more complex task because, unlike the offshore and mothership sectors, inshore co-ops may form around each AFA-eligible shoreside processor for a possible total of eight individual inshore co-ops, each with their own allocation of pollock TAC. The allocation of pollock to each co-op would be dependent on the aggregate pollock catch history of the catcher vessels delivering to a shoreside processor under a fishery cooperative agreement. A general summary of the issues associated with the adequacy of catch history data, database development, vessel permitting, and scheduling considerations is provided below.

9.1 Sources and Adequacy of Historic Data on Groundfish and PSC Catch by Vessel

ADF&G fish ticket data provide information, by vessel and species, of the fish landed by catcher vessels, and are available in electronic form. These data can be considered more reliable for fish with commercial value, and less reliable for species delivered but not purchased. They are not reliable for PSC catch or for groundfish discarded at sea.

Groundfish catcher-vessel logbooks, required for all catcher vessels over 60 ft LOA, document skippers' reports of groundfish and PSC at-sea discards. They do not document retained species weights. Catcher vessel logbook data are not in electronic form. Logbooks are archived with NMFS Enforcement.

Processor Weekly Production Reports provide no information on catcher vessel deliveries. They report aggregate landing amounts for a week.

Observer data, for observed catcher vessels, provide haul by haul weight estimates and species composition sampling for some hauls or sets and are available in electronic form. In some fisheries, where the observer has no opportunity to sample on a haul by haul basis, the species composition is determined for the delivery as a whole and pro-rated back out to the individual hauls. PSC management has never been done at the level of individual catcher vessels – rather data from CV observers are pooled and applied to groundfish catch by the shoreside sector as a whole.

In summary, a complete, reliable source of groundfish and PSC catch for catcher vessels suitable for determining quota allocations based on actual harvested amounts does not exist. Basing groundfish allocations on landed catch would lead to the fish tickets as the most reliable source, at least for commercially valuable species. PSC is problematic. Additional assumptions and analysis of existing observer data are likely needed to determine if using individual CV observer data would yield acceptable results. Accommodation for 30% covered vessels would have to be made. For example, one option could be to prorate PSC history to catcher vessels based on the amount of groundfish landed.

Inshore Cooperative Database Requirements. NMFS believes that a verified database of 1995-97 catcher vessel pollock landings must be developed from ADF&G fish ticket data, similar to the process for determining individual quota share for an IFQ program. Each catcher vessel would be assigned a proportion or percentage of the total 1995-97 inshore landings. This percentage would be analogous to IFQ quota share and NMFS would inform each catcher vessel owner of the official pollock quota share attributed to each AFA-listed catcher vessel. The co-op quota share of each individual inshore catcher vessel could be listed on each vessel's Alaska groundfish fishery permit. An inshore co-op's annual pollock allocation would be calculated as the sum of each participating catcher vessel's co-op pollock quota share, multiplied by the annual inshore pollock allocation.

Given the potential inaccuracies in the fish ticket data, and the allocative nature of the AFA inshore co-ops, NMFS further believes that vessel owners should be provided the opportunity to appeal the inshore co-op pollock "quota share" attributed to their vessel if the vessel owner has information to indicate the fish ticket data upon which the vessels quota shore was derived is wrong or incomplete. Therefore, a mechanism for administrating such appeals must be established. The AFA inshore co-op quota share appeals process could be similar or identical to the existing IFQ appeals procedure set out at 50 CFR 679.43

The process for developing the database on which to derive vessel-specific historic nonpollock groundfish harvest for purposes of sideboard harvest limitations would be similar to that used to establish vessel-specific pollock quota share, although NOAA General Counsel has opined that the need to provide an appeals process to address disputes about historical data on nonpollock groundfish landings is not as paramount given these data would be used to establish harvest limitations, not allocations.

The development of prohibited species catch estimates for AFA-eligible pollock catcher vessels delivering to inshore processors would be difficult without some widespread assumptions and extrapolations from limited observer data (see above discussion on adequacy of historical catch data).

9.2 New Permitting Requirements

To implement the provisions of the AFA, NMFS will need to establish a series of new permit requirements. To fulfill the statutory requirements of the AFA, this action would establish new permit requirements for AFA catcher/processors, AFA catcher vessels, AFA motherships, AFA inshore processors, and AFA inshore cooperatives. Any vessel used to engage in directed fishing for a non-CDQ allocation of pollock in the BSAI, and any processor that receives pollock harvested in a non-CDQ directed pollock fishery in the BSAI would be required to maintain a valid AFA permit onboard the vessel or at the plant location at all times that non-CDQ pollock is harvested or processed. These new AFA permits would not exempt a vessel operator, vessel owner, or pollock processor from any other applicable permit or licensing requirements required by State or Federal regulations. However, vessels fishing for BSAI pollock under the CDQ program and processors processing pollock harvested under the CDQ program would not be required to have AFA permits.

The owner of a vessel or processor could apply for an AFA permit at any time during the duration of the AFA. Once issued, AFA vessel and processor permits would be valid for the duration of the AFA and would expire on December 31, 2004. AFA vessel and processor permits could not be used on or transferred to any vessel or processor that is not listed on the permit. However, AFA permits could be amended to reflect any change in the ownership of the vessel or processor. In contrast to vessel and processor permits, AFA inshore cooperative permits would be valid only for the fishing year for which they are issued, but would be renewable on an annual basis.

AFA permit applications. NMFS will create application forms for all AFA permits that will be available upon request from the NMFS Alaska Region, and also will be available for downloading on the NMFS Alaska Region home page (http://www.fakr.noaa.gov). AFA vessel and processor permits would be issued to the current owner of a qualifying vessel or processor if he/she submits to the Regional Administrator a completed AFA permit application that is subsequently approved. NMFS also will establish an appeals process under which applicants could appeal the denial of an AFA permit or AFA permit endorsement. The appeals process for AFA permits would be similar to the process currently in place for the individual fishing quota (IFQ) program and license limitation program (LLP) appeals.

AFA catcher/processor permits. Under the AFA, the statutory list of qualified catcher/processors took effect on January 1, 1999 and NMFS has already issued AFA catcher/processor permits to the owners of all qualified catcher/processors. Currently permitted AFA catcher/processors would likely be issued new AFA permits that would be valid for the duration of the AFA. AFA catcher/processor permits will be reissued automatically and the owners of AFA catcher/processors would not be required to re-submit AFA permit applications. Two categories of AFA catcher/processor permits would be issued: Vessels listed by name in section 208(e)(1) through (20) of the AFA would be issued unrestricted AFA catcher/processor permits. Vessels qualifying for AFA catcher/processor permits under section 208(e)(21) would be issued restricted AFA catcher/processor permits, and would be limited in the aggregate to not more than 0.5 percent of the catcher/processor sector TAC allocation.

AFA catcher vessel permits. Under the AFA, a catcher vessel would qualify to fish for BSAI pollock if it is listed by name in the AFA, or, if its history of participation in the BSAI pollock fishery meets certain criteria set out in the AFA. AFA catcher vessel permits would be endorsed to authorize fishing for pollock for delivery to AFA catcher/processors, AFA inshore processors, or AFA motherships. An applicant for an AFA catcher vessel permit would be required to indicate the sector endorsement(s) that the vessel qualifies for. NMFS will establish an official AFA record that includes the relevant catch histories of all potentially qualifying vessels and will verify all claims of endorsement qualification against the official AFA record.

Members of industry have requested that a preliminary list of the AFA eligible catcher vessels be made available to the public. That list has been compiled and is included in Tables 9.1 to 9.4 below. Four separate groupings of catcher vessels are reported in this section. Those grouping correspond to the table structures in Chapter 7, where the catcher vessels that are likely eligible to make deliveries inshore, to inshore and motherships, to motherships only, and to catcher/processors are treated separately.

Table 9.1: Preliminary List of AFA Eligible Catcher Vessels in the Inshore Sector

ADF&G	Name	ADF&G	Name	ADF&G	Name
57934	AJ	55153	DONA PAULITA	48173	OCEAN HOPE 3
69765	ALASKA DAWN	14767	ELIZABETH F	64667	OCEAN STORM
38989	ALASKA ROSE	32554	ENDURANCE	51073	OCEAN ENTERPRISE
57321	ALASKAN COMMAND	54653	EXCALIBUR II	50759	PACIFIC ENTERPRISE
48215	ALDEBARAN	33112	EXODUS	54643	PACIFIC KNIGHT
40749	ALSEA	53247	F/V WESTWARD I	54645	PACIFIC MONARCH
00039	AMERICAN EAGLE	55111	FIERCE ALLEGIANCE	61450	PACIFIC PRINCE
00029	ANITA J	32473	FLYING CLOUD	61792	PACIFIC RAM
51092	ARCTIC I	40309	GOLD RUSH	00047	PACIFIC VIKING
55923	ARCTIC III	35687	GOLDEN DAWN	57149	PEGASUS
57440	ARCTIC IV	32817	GOLDEN PISCES	09200	PEGGY JO
64105	ARCTIC VI	37660	GREAT PACIFIC	12668	PERSEVERANCE
01112	ARCTIC WIND	41312	GUN-MAR	37036	POSEIDON
45978	ARCTURUS	39230	HALF MOON BAY	33744	PREDATOR
38547	ARGOSY	47795	HICKORY WIND	00006	PROGRESS
56153	AURIGA	62922	LADY JOANNE	56395	RAVEN
56154	AURORA	56119	LESLIE LEE	40840	ROYAL AMERICAN
40638	BERING ROSE	70221	LISA MARIE	00046	ROYAL ATLANTIC
62892	BLUE FOX	41520	LISA MELINDA	35957	SEA WOLF
59779	CAITLIN ANN	30332	LONESTAR	00077	SEADAWN
61432	CAPE KIWANDA	60650	MAJESTY	59476	SEEKER
57634	CARAVELLE	49617	MARATHON	00012	STAR FISH
62906	CHELSEA K	00055	MARCY J	34931	STARLITE
54648	COLLIER BROS	66196	MESSIAH	39197	STARWARD
39056	COLUMBIA	59123	MISS BERDIE	39860	STORM PETREL
53843	COMMODORE	38431	MORNING STAR	35527	SUNSET BAY
56676	DEFENDER	56164	MS AMY	40250	TOPAZ
60655	DESTINATION	00961	NORDIC STAR	00008	VIKING
08668	DOMINATOR	36808	NW ENTERPRISE	36045	VIKING EXPLORER
55199	DONA LILIANA	48171	OCEAN HOPE 1	34919	WALTER N
51672	DONA MARTITA				

Table 9.2: Preliminary List of AFA Eligible Catcher Vessels in both the Inshore and Mothership Sectors

ADF&G	Name	ADF&G	Name	ADF&G	Name
00045	ALYESKA	06440	MARK I	00033	PACIFIC FURY
00028	AMBER DAWN	00200	NORDIC FURY	58821	TRAVELER
24255	AMERICAN BEAUTY	00032	OCEAN LEADER	39946	VANGUARD
31672	MARGARET LYN	03404	OCEANIC	22294	WESTERN DAWN
12110	MAR-GUN	06931	PACIFIC CHALLENGER		

Table 9.3: Preliminary List of AFA Eligible Catcher Vessels in the Mothership Sector

ADF&G	Name	ADF&G	Name	ADF&G	Name
50570	ALEUTIAN CHALLENGER	68858	MISTY DAWN	55512	POPADO II
33697	CALIF HORIZON	38294	PACIFIC ALLIANCE	38342	VESTERAALEN
61372	FIERCE SEA				

Table 9.4: Preliminary List of AFA Eligible Catcher Vessels in the Catcher/Processor Sector

ADF&G	Name	ADF&G	Name	ADF&G	Name
62152	AMERICAN CHALLENGER	32858	NEAHKAHNIE	40969	SEA STORM
59687	FORUM STAR	00101	OCEAN HARVESTER	54654	TRACY ANNE
41021	MUIR MILACH				

AFA catcher vessel sideboard endorsements . The catcher vessel sideboard endorsements identified under the Council's preferred alternative in Chapter 7.0 would be implemented through endorsements on the catcher vessel's AFA permit. An AFA catcher vessel would be prohibited from retaining any BSAI crab species unless the catcher vessel's AFA permit contains an endorsement for that crab species. AFA catcher vessel permits could be endorsed for the Bristol Bay Red King Crab, St. Mathews Island blue king crab, Pribilof Island king crab, Aleutian Islands brown king crab, Aleutian Islands red king crab, Opilio Tanner crab, and Bairdi Tanner crab fisheries based on a vessel's history of participation in each of those fisheries and according to the criteria set out in the preferred alternative in Chapter 11.0. Applicants for AFA catcher vessel permits would be required to indicate on the permit application which AFA crab sideboard endorsements the vessel qualifies for based on the qualifying criteria set out in regulation. All claims of qualification will be verified by NMFS. To participate in a BSAI crab fishery, the operator of an AFA catcher vessel would have to have a valid LLP license for that crab fishery as well as an AFA catcher vessel permit containing an endorsement for that crab fishery.

AFA Mothership permits . Under the AFA, three motherships are authorized by name to process pollock harvested in the BSAI directed pollock fishery for delivery to motherships. The owner of a mothership would be issued an AFA mothership permit if the mothership is listed by name in section 208(d) of the AFA. However, the owner of a mothership wishing to process pollock harvested by a fishery cooperative also would be required to apply for and receive a cooperative processing endorsement on its AFA mothership permit.

Section 211(c)(2)(A) of the AFA, imposes crab processing restrictions on the owners of AFA mothership and AFA inshore that receive pollock from a fishery cooperative. These processing limits extend not just to the AFA processing facility itself, but to any other crab processing facility which shares a 10 percent or more common ownership with the AFA mothership or AFA inshore processor. To implement the crab processing restrictions contained in section 211(c)2)(A) of the AFA, NMFS would require that applicants for AFA mothership and AFA inshore processor permits disclose on their permit application the names of any crab processors in which the owners of the AFA mothership or AFA inshore processor share a 10 percent or greater ownership interest, collectively. An applicant for an AFA mothership or AFA inshore processor permit who does not disclose this crab processor ownership information would receive an AFA mothership permit or AFA inshore processor permit but would be denied an endorsement authorizing the processor to receive and process pollock harvested by a fishery cooperative.

AFA inshore processor permits . Under the AFA, inshore processors are authorized to receive and process BSAI pollock based on the processing history of the facility in 1996 and 1997. An applicant would receive an unrestricted AFA inshore processor permit if the Regional Administrator determines that the inshore processing facility processed more than 2,000 metric tons round-weight of pollock harvested in the inshore directed pollock fishery during both 1996 and 1997. An applicant would receive a restricted AFA inshore processor permit if the Regional Administrator determines that the inshore processing facility processed pollock harvested in the inshore directed pollock fishery during 1996 or 1997, but did not process more than 2,000 metric tons round-weight of pollock during both 1996 and 1997. A restricted AFA inshore processor permit would prohibit the inshore processing facility from processing more than 2,000 metric tons round-weight of BSAI pollock in any one year.

The owner of an AFA inshore processor wishing to process pollock harvested by a fishery cooperative also would be required to have a cooperative processing endorsement on the AFA inshore processing permit. The requirements for a AFA inshore processor cooperative processing endorsement would be the same as those listed for AFA motherships above.

The Council also recommended that each AFA inshore processor be restricted to operating in the single geographic location in which it operated in 1996 or 1997 when processing pollock harvested in the BSAI directed pollock fishery as set out in the options for single geographic location requirements in Chapter 4.0. To implement this restriction, land-based shoreside processors would be restricted to operating in the last physical location in which the facility processed BSAI pollock during 1996-1997 qualifying period. Stationary floating processors would be restricted to operating in a location within Alaska state waters that is within 5 nautical miles of the last position in which the floating inshore processor processed BSAI pollock during the 1996-1997 qualifying period.

Inshore cooperative fishing permits . To implement the statutory requirements of the AFA to grant allocations of pollock to inshore cooperatives, an inshore catcher vessel cooperative formed for the purpose of cooperatively managing directed fishing for pollock would be issued an AFA inshore cooperative fishing permit after submission of a completed application for an inshore cooperative fishing permit. To implement this provision of the law, an application deadline of December 1 is necessary so that NMFS and the Council can review cooperative agreements and make interim allocations of pollock TAC to cooperatives on an annual basis at the December Council meeting.

As part of the application for an inshore cooperative fishing permit, an inshore cooperative would be required to certify that: (1) The cooperative contract was signed by the owners of at least 80 percent of the qualified catcher vessels that delivered pollock to the cooperative's designated AFA inshore processor, (2) each catcher vessel in the cooperative delivered more BSAI pollock to the designated AFA inshore processor than to any other AFA inshore processor during the year prior to the year in which the cooperative fishing permit will be in effect, and (3) each member vessel is a qualified AFA catcher vessel, is otherwise eligible to fish for groundfish in the BSAI, and has no permit sanctions or other type of sanctions against it that would prevent it from fishing for groundfish in the BSAI. A catcher vessel that is ineligible to harvest BSAI pollock during the year in which the cooperative fishing permit will be in effect due to permit sanctions, lack of an AFA permit, lack of LLP permit, or lack of other required permit, could not become a member of an inshore cooperative that receives an inshore cooperative fishing permit. A cooperative fishing permit could be amended to add or subtract a qualified catcher vessel upon submission of a revised application that is received by the NMFS Alaska Region prior to the December 1 deadline and that is subsequently approved by the Regional Administrator.

Inshore cooperative fishing permits would be valid for one calendar year only, but could be renewed on an annual basis after submission of a new application that is received by NMFS prior to the application deadline and that is subsequently approved by the Regional Administrator.

Replacement vessels and processors. In the event of the actual total loss or constructive total loss of an AFA catcher vessel, AFA mothership, or AFA catcher/processor, the owner of such vessel would be able to replace the vessel with a replacement vessel that would be eligible in the same manner as the original vessel after submission of an application for an AFA replacement vessel that is subsequently approved by NMFS. The AFA contains detailed restrictions on replacement vessels and processors that are set out in Appendix 1.

9.3 Options for the allocation of pollock TAC to inshore cooperatives

9.3.1 Compensation for offshore catch history

Under the AFA, eligible inshore catcher vessels will be allowed to form cooperatives in 2000. The allocation of pollock to each cooperative will be based on the individual catch histories of each member vessel. The

Council is considering three options for calculating catch history, 1995-97, 1992-97, or the best two years from the two previous options. Section 210(b)(4) of the AFA specifically lists the years 1995, 1996 and 1997 as the years to be considered, but Section 213 of the AFA provides the Council with the authority to choose another method for allocating pollock to inshore cooperatives.

Some inshore pollock catcher vessels have made deliveries to both the inshore and offshore sectors during the qualifying years. Catcher vessels with histories split between the mothership sector and the inshore sector are able to fish both histories pursuant to the AFA. However, catcher vessels which made deliveries to both the inshore sector and the catcher vessel to catcher/processor sector lose the catch history that was delivered to the catcher/processor sector. This occurs because the AFA does not specifically create a mechanism for these catcher vessels to obtain credit for that catch history. The AFA states in section 210(b)(4) that *"any contract implementing a fishery cooperative under paragraph (1) which has been entered into by the owner of a qualified catcher vessel eligible under section 208(a) that harvested pollock for processing by catcher/processors or motherships in the directed pollock fishery during 1995, 1996, and 1997 shall, to the extent practicable, provide fair and equitable terms and conditions for the owners of such qualified catcher vessel."* This language seems to place the burden of compensating members of a cooperative on the cooperative itself. However if each inshore processor forms a separate cooperative, the burden of compensating members may be more onerous on some cooperatives than others. For example, a cooperative that did not have any members with offshore catch history would not need to "pay" any compensation, but a cooperative that had several members with offshore catch history could require substantial compensation "payments" by its members.

While the AFA states that both the catch delivered to catcher/processors and motherships would be eligible for compensation, the AFA allows catcher vessels to operate in both the inshore and mothership sectors, if they qualify for both. Therefore, several members of industry have indicated that the focus should only be on the lost catch in the catcher/processor sector. Vessels in the inshore sector that had deliveries to motherships during the qualifying years would simply lose that catch history if they did not meet the minimum requirements to be part of the mothership sector.

Section 210(b)(1) states that only catch delivered to the inshore sector will be considered by the Secretary when determining the amount of quota to be allocated to the inshore cooperative(s). Vessels will be disadvantaged in joining a cooperative if a substantial portion of their history was delivered to catcher/processors in the years used to determine catch history. As an example, a catcher vessel fishes for a catcher/processor in 1995 and 1996 and then fishes for a shore plant in 1997. That catcher vessel is not eligible under the AFA for the future to deliveries to catcher/processors. The vessel is eligible to fish for the inshore sector, but when cooperatives are formed will only receive credit for the fish delivered in 1997, while most of the other members will receive credit for 1995, 1996 and 1997. As a result, the catcher vessel in this example will be disadvantaged.

The Council authorized that a discussion paper be developed to outline *"options for compensation to inshore catcher vessels with catch history delivering to catcher/processors that is no longer available to them under AFA"*. The problem faced by these vessels could be addressed by a modification to the criteria by which the Secretary determines how much quota is allocated to each cooperative. Section 213(c)(3) of AFA provides that the Council may modify *"the criteria required in paragraph (1) of Section 210(b) to be used by the Secretary to set the percentage allowed to be harvested by such catcher vessels."*

The following change to Section 210(b)(1)(B) was recommended by Midwater Trawlers Cooperative (MTC) and would appear to remedy this problem:

"*. . . the Secretary shall allow only such catcher vessels (and catcher vessels whose owners voluntarily participate pursuant to paragraph (2)) to harvest the aggregate percentage of the directed fishing allowance under Section 206(b)(1) in the year in which the fishery cooperative will be in effect that is equivalent to the aggregate total amount of pollock harvested by such catcher vessels (and by such catcher vessels whose owners voluntarily participate pursuant to paragraph (2)) in the directed pollock fishery for processing by the inshore component, together with the amount harvested by such vessels for processing by catcher/processors in the offshore component during 1995, 1996 and 1997, relative to the aggregate total amount of pollock harvested in the directed pollock fishery for processing by the inshore component together with the aggregate total amount harvested by all catcher vessels (excluding those eligible under 208(b)) for processing by catcher/processors in the offshore component during such years and shall prevent such catcher vessels (and catcher vessels whose owners voluntarily participate pursuant to paragraph (2)) from harvesting in the aggregate in excess of such percentage of such directed fishing allowance.*"

This modification would allow a catcher vessel with catch history based on deliveries to catcher/processors, that is otherwise lost under the AFA, to bring that catch history into a cooperative while sharing the burden among all members of the inshore cooperative/cooperatives. In addition, the modification does not change the AFA sector allocations.

Preliminary data indicates that 66,764 mt of pollock were delivered to catcher/processors by 42 different AFA catcher vessels from the inshore sector. The four vessels making the most deliveries accounted for 35,783 mt of the catch, or about 53 percent of the total.

A total of 1,126,275 mt of pollock was delivered by the AFA inshore catcher vessels to inshore processors between 1995-97. Adding the catch delivered inshore to the catch delivered to catcher processors will result in the total amount of pollock catch in the inshore quota pool, if vessels are compensated for their deliveries to catcher/processors. Dividing the deliveries to catcher/processors by the total quota pool yields the compensation, or "adjustment", payment that catcher vessels would be required to make.

Six sub-options setting minimum pollock delivery levels, below which a vessel would be ineligible for compensation, were included. The levels selected are 250 mt, 500 mt, 1,000 mt, 2,000 mt, 3,000 mt, and 5,000 mt. Table 10.5 reports the total amount of catch eligible for compensation at each of these thresholds in the cumulative total column. The "Inshore Adjustment" column reports the percentage of each vessels history that they would have to pay to compensate catcher vessels for their deliveries to catcher/processors. Note that the adjustment is based on the cumulative total column added to the inshore deliveries to estimate the total inshore catch pool. The bottom row of the table, titled <250 mt, shows the compensation required if no minimum catch histories were imposed.

Table 9.5: Compensation for inshore catcher vessels that had pollock deliveries to catcher/processors from 1995-97, break points are based on total catch.

Pollock to C/Ps	Number of Vessels	Pollock Catch	Avg /Vessel	Cum. Total	Inshore Adjustment
$5,000 mt	3	31,745	10,582	31,745	-2.74%
3,000 - 4,999 mt	5	18,279	3,656	50,024	-4.25%
2,000 - 2,999 mt	2	Conf.	Conf.	Conf.	Conf.
1,000 - 1,999 mt	3	Conf.	Conf.	58,727	-4.96%
500- 999 mt	3	2,109	703	60,835	-5.12%
250 - 499 mt	11	3,831	348	65,148	-5.47%
<250 mt	15	1,400	93	66,764	-5.60%

The next two tables impose inshore catch history ceilings of 2,000 mt and 3,000 mt on the compensation calculation. The Council could also choose a ceiling of 5,000 mt, but the results are no different than the 3,000 mt ceiling. Vessels that landed an amount of pollock greater than the ceiling would not be compensated for their deliveries to catcher/processors. Including these options gives the Council the flexibility to compensate only the catcher vessels they feel have small amounts of inshore deliveries.

Table 9.6: Compensation for inshore catcher vessels that had pollock deliveries to catcher/processors and landed less than 2,000 mt to the inshore sector from 1995-97, based on total catch.

Pollock to C/Ps	Number of Vessels	Cum. Total	Inshore Adjustment
>5,000 mt	1	Conf.	Conf.
3,000 to 4,999 mt	4	21,199	-1.85%
2,000 to 2,999 mt	0	21,199	-1.85%
1,000 to 1,999 mt	1	Conf.	Conf.
500 to 999 mt	3	24,647	-2.14%
250 to 499 mt	1	Conf.	Conf.
<250 mt	2	25,200	-2.19%

Table 9.7: Compensation for inshore catcher vessels that had pollock deliveries to catcher/processors and landed less than 3,000 mt to the inshore sector from 1995-97, based on total catch.

Pollock to C/Ps	Number of Vessels	Cum. Total	Inshore Adjustment
$5,000 mt	1	Conf.	Conf.
3,000 to 4,999 mt	4	21,199	-1.85%
2,000 to 2,999 mt	1	Conf	Conf.
1,000 to 1,999 mt	2	26,199	-2.27%
500 to 999 mt	3	28,307	-2.45%
250 to 499 mt	1	Conf.	Conf.
<250 mt	2	28,860	-2.50%

Note: Information in this table does not change if the inshore delivery ceiling is changed from 3,000 mt to 5,000 mt.

Table 9.8 provides information on the compensation of catcher vessels if the break points are based on average annual pollock catch from 1995-97, instead of total harvests during that time period. This method of describing catch history assigns the majority (28) of the vessels to the < 250 mt category. None of the vessels averaged 5,000 mt of pollock or more during the three years, which may be due to the limited amount of catch delivered by the these vessels to catcher/processors in 1997. Recall that 1997 was the sole qualifying year for catcher vessels in the catcher/processor sector.

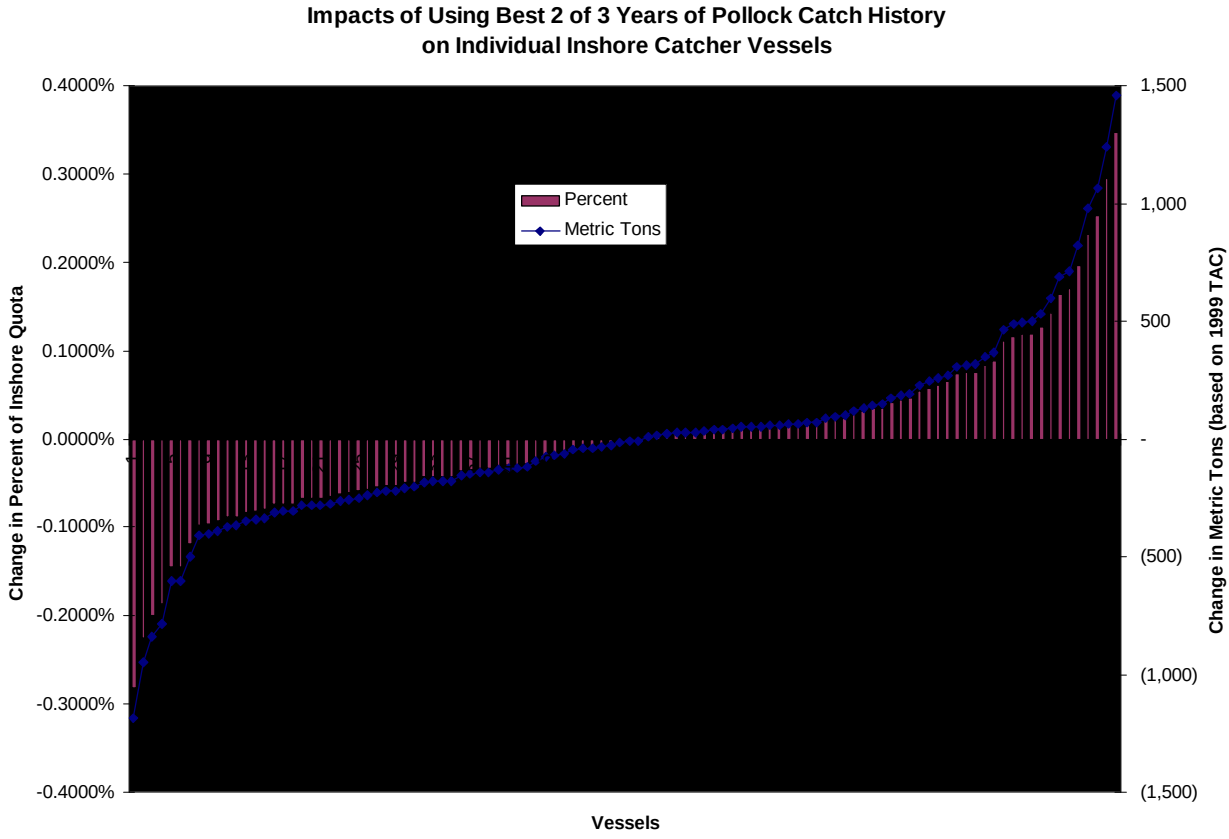
Table 9.8: Compensation for inshore catcher vessels that had pollock deliveries to catcher/processors from 1995-97, break points are based on average catch.

Pollock to C/Ps	Number of Vessels	Avg /Vessel	Inshore Adjustment
$5,000 mt	0	0	-0.00%
3,000 - 4,999 mt	2	Conf.	Conf.
2,000 - 2,999 mt	1	Conf.	-2.74%
1,000 - 1,999 mt	5	1,219	-4.25%
500- 999 mt	3	653	-4.73%
250 - 499 mt	3	404	-5.02%
<250 mt	28	86	-5.60%

9.4 Determine Inshore and Mothership Pollock Catch History Based on Best 2 of 3 Years

The AFA prescribes the criteria for determining which catcher vessels are eligible to participate in the inshore and mothership cooperatives in Section 208 (a) and Section 208 (c) of the Act, respectively. Those sections of the AFA do not require that all three years of catch history be used to determine the amount of pollock catcher vessels would be allowed to take with them into a cooperative.

An alternative has been added that would allow catcher vessels in the inshore sector to use their best two years of pollock catch history during the three year qualification window. The impacts of that option are depicted in the chart below. It will make about half of the vessels better off and the other half of the inshore fleet will be worse off as a result of using 2 of 3 years catch history. In terms of who wins and loses, the winners are those vessels with inconsistent catch histories, and the losers are the vessels that made approximately equal amounts of landings each year. The tails of the graph represent the vessels with the largest catch histories. In terms of tons and percent of TAC, they are the biggest winners and losers. Vessels with smaller catch levels, whether they had consistent or inconsistent catch histories, and vessels with somewhat varied catch histories are depicted in the middle portion of the chart.



9.5 Schedule for Annual Specification of Pollock Co-op Allocations

Based on AFA references to annual cooperative arrangements, NMFS assumes that the duration of a fishery cooperative would be for a one-year period. Ideally, fishery cooperative agreements should be completed by late September of each year to allow NMFS sufficient time to calculate pollock allocations based on participating catcher vessel inshore pollock "quota shares," provide the Council opportunity to review and

assess inshore pollock cooperative arrangements, and to annually specify separate inshore cooperative pollock allocations in the interim specifications. The interim specifications also would include any non-pollock harvest specifications that would be applied at either the inshore sector or cooperative level. The interim specifications would be superseded by the final specifications for fishing activity after the pollock roe season. The AFA provides for vessel entry into a cooperative after a cooperative has been formed and before the calendar year in which fishing under the co-op would occur (section 210(b)(2)). This activity would essentially change the cooperative's allocation of pollock and harvest sideboard limitations. Administrative processes should be developed to avoid having to republish inshore allocations of pollock among different cooperatives pending such changes to co-op specific participants.

9.6 Management of Inshore Catcher Vessel Co-ops

The AFA authorizes the formation of pollock co-ops within each of the three pollock industry sectors established by the AFA. However, a fundamental difference exists between the current offshore co-ops and possible future inshore-sector co-ops. The catcher/processor, offshore catcher vessel, and potential mothership co-ops require no separate action or implementation by NMFS. NMFS will monitor and enforce sectoral pollock TAC allocations in the same manner regardless of the presence or absence of the co-op because the formation of a co-op does not require NMFS to sub-allocate amounts of pollock TAC. The individual catch shares harvested by different catcher/processors, offshore catcher vessels, and the mothership fleet are of no consequence to NMFS except as they contribute to each sector's catch in the aggregate.

The inshore catcher vessel co-operatives contemplated by the AFA pose an entirely different management issue. Section 211 (b) of the AFA specifies that NMFS set-aside separate TAC allocations to each co-op upon formation of the co-op and manage each co-op's TAC allocation separately:

> *(b) CATCHER VESSELS ONSHORE.—*
>
> *(1) CATCHER VESSEL COOPERATIVES.—Effective January 1, 2000, upon the filing of a contract implementing a fishery cooperative under subsection (a) which—*
>
> *(A) is signed by the owners of 80 percent or more of the qualified catcher vessels that delivered pollock for processing by a shoreside processor in the directed pollock fishery in the year prior to the year in which the fishery cooperative will be in effect; and*
>
> *(B) specifies, except as provided in paragraph (6), that such catcher vessels will deliver pollock in the directed pollock fishery only to such shoreside processor during the year in which the fishery cooperative will be in effect and that such shoreside processor has agreed to process such pollock,* ***the Secretary shall allow only such catcher vessels (and catcher vessels whose owners voluntarily participate pursuant to paragraph (2)) to harvest the aggregate percentage of the directed fishing allowance under section 206(b)(1) in the year in which the fishery cooperative will be in effect that is equivalent to the aggregate total amount of pollock harvested by such catcher vessels (and by such catcher vessels whose owners voluntarily participate pursuant to paragraph (2)) in the directed pollock fishery for processing by the inshore component during 1995, 1996, and 1997 relative to the aggregate total amount of pollock harvested in the directed pollock fishery for processing by the inshore component during such years and shall prevent such catcher vessels (and catcher vessels whose owners voluntarily participate pursuant to paragraph (2)) from harvesting in aggregate in excess of such percentage of such directed fishing allowance.****[emphasis added]*
>
> *(2) VOLUNTARY PARTICIPATION.—Any contract implementing a fishery cooperative under paragraph (1) must allow the owners of other qualified catcher vessels to enter into such contract after it is filed and before the calender year in which fishing will begin under the same*

terms and conditions as the owners of the qualified catcher vessels who entered into such contract upon filing.

(3) QUALIFIED CATCHER VESSEL.—For the purposes of this subsection, a catcher vessel shall be considered a "qualified catcher vessel" if, during the year prior to the year in which the fishery cooperative will be in effect, it delivered more pollock to the shoreside processor to which it will deliver pollock under the fishery cooperative in paragraph (1) than to any other shoreside processor.

(4) CONSIDERATION OF CERTAIN VESSELS.—Any contract implementing a fishery cooperative under paragraph (1) which has been entered into by the owner of a qualified catcher vessel eligible under section 208(a) that harvested pollock for processing by catcher/processors or motherships in the directed pollock fishery during 1995, 1996, and 1997 shall, to the extent practicable, provide fair and equitable terms and conditions for the owner of such qualified catcher vessel.

(5) OPEN ACCESS.—A catcher vessel eligible under section 208(a) the catch history of which has not been attributed to a fishery cooperative under paragraph (1) may be used to deliver pollock harvested by such vessel from the directed fishing allowance under section 206(b)(1) (other than pollock reserved under paragraph (1) for a fishery cooperative) to any of the shoreside processors eligible under section 208(f). A catcher vessel eligible under section 208(a) the catch history of which has been attributed to a fishery cooperative under paragraph (1) during any calendar year may not harvest any pollock apportioned under section 206(b)(1) in such calendar year other than the pollock reserved under paragraph (1) for such fishery cooperative.

(6) TRANSFER OF COOPERATIVE HARVEST.—A contract implementing a fishery cooperative under paragraph (1) may, notwithstanding the other provisions of this subsection, provide for up to 10 percent of the pollock harvested under such cooperative to be processed by a shoreside processor eligible under section 208(f) other than the shoreside processor to which pollock will be delivered under paragraph (1).

Although the term "co-op" is used in the AFA, such a system is really closer to a voluntary IFQ system at the processor level. Implementation of such a program raises an entire suite of management issues associated with individual quota monitoring, such as those faced by the CDQ program and halibut/sablefish IFQ program. Consequently, a new regulatory and management infrastructure must be developed before NMFS can issue TAC allocations to individual inshore co-ops. The purpose of this section is to identify issues related to the management of inshore pollock co-ops.

9.6.1 Database Development and Determination of Co-op Shares

Section 211(b) of the AFA specifies in statute a formula for determining the share of the BSAI inshore pollock TAC allocation that each co-op would receive. Specifically, each co-op would receive a TAC allocation "equivalent to the aggregate total amount of pollock harvested by such catcher vessels... in the directed pollock fishery for processing by the inshore component during 1995, 1996, and 1997 relative to the aggregate total amount of pollock harvested in the directed pollock fishery for processing by the inshore component during such years."

To support the calculation of co-op pollock allocations, NMFS intends to establish a database known as the "Official NMFS AFA Record" (Official Record). This Official Record will enable NMFS to:

(a) establish harvest histories and vessel ownership for each catcher vessel which qualifies for the inshore directed fishing allowance in Section 206(b)(1);

(b) establish processing histories for shoreside processors eligible under 208(f)(1);

(c) determine appropriate co-op membership for 2000;
(d) comply with Section 210 which requires that the North Pacific Fishery Management Council (Council) and Secretary of Commerce (Secretary) make available to the public "…the amount of pollock and other fish to be harvested to each party to such contract…"; and
(e) maintain confidentiality of harvest records by distinguishing between the "owners" of confidential data; and those who seek privileges based on those data.

Official Record. The process of building the Official Record is anticipated to be similar to that used for the Individual Fishing Quota and License Limitation programs. For each inshore catcher vessel, the Official Record will be used to establish the 1995, 1996, 1997 and 1999 "fishing history". This will be compiled from Federal and State data and will contain harvest, permit, vessel, and demographic information about permit holders (including "skippers") and vessel owners. The Official Record will be presumed to be accurate but could be successfully challenged with appropriate and sufficient evidence that the Official Record is incomplete or incorrect. NMFS would notify constituents of the summarized contents of the Official Record (e.g., vessel characteristics and total pounds landed (by year and species) and afford them a finite opportunity to challenge NMFS' data. Claims that rebut the Official Record but which are not accepted by NMFS would be denied in an Initial Administrative Determination, and the constituent would be afforded the opportunity to appeal. Because the entire inshore directed fishing allowance of pollock for a year will be parsed based on the Official Record as it exists just prior to a fishing season, resolution of appeals in favor of appellants after that date would likely not affect established allocations and guideline harvest levels for that fishing year. NMFS will need to maintain records to document the data gathering/verification/denial/appeal process for each inshore delivering vessel and shoreside processor. Vessel harvest histories would be established once, and would result in calculation of the fractional share of the inshore allocation accrued to each catcher vessel.

Remaining time in 1999 is insufficient for NMFS to establish the regulatory framework, including PRA requirements; to provide summaries; and for constituents to challenge the Official Record prior to the start of fisheries in January 2000. In that case, NMFS might have to rely on the compiled Official Record without challenge for 2000 and defer that opportunity until the year 2000 for 2001 and future fisheries.

The NMFS Record will consist of (1) harvest data; (2) processing data; (3) permits data; (4) LLP eligibilities; (5) vessel characteristics, including LOA and ownership; and (6) demographic data about permit holders and vessel owners. Data would be derived from: (1) State of Alaska Fish Tickets; (2) NMFS Weekly Product Reports and/or State of Alaska Commercial Operators Annual Reports; (3) NMFS License Limitation eligibility data; (4) State of Alaska permit files; (5) NMFS and State of Alaska vessel permit and registration files; and (6) NMFS and State of Alaska demographic files. NMFS must protect confidentiality of harvest information and safeguard against inappropriate disclosure during eligibility testing and allocation/guideline harvest assignments. Therefore, in building this Official Record, NMFS must be able to unequivocally identify participating people, processors, and vessels; and must maintain confidentiality of certain data. State of Alaska data will have to be provided by the Commercial Fisheries Entry Commission, which can provide links among State harvest, permit, vessel, and person data without disclosure of Social Security numbers which are confidential under the Privacy Act.

Data Issues. Major data concerns include: (1) data accuracy and availability; (2) estimating discards and PSC; (3) basis for determining vessel pollock "quota shares;" (4) resolution of discrepancies between Fish Ticket and WPR harvest data sources; (5) time and staff resources required to process data and establish allocations and guideline harvest levels; and (6) confidentiality. Each is discussed below:

Data availability. The only complete source of inshore catcher vessel harvest information is State of Alaska fish tickets. ADF&G staff [2] has indicated that for the BSAI, groundfish and shellfish (crab) fish ticket data sets are reasonably complete, accurate and readily available through calendar year 1998 (and that little groundfish is reported on other types of fish tickets in that area). She suggested that NMFS obtain a more recent set of State data (fish tickets, vessel and permit ownership, and person demographics) than was provided for LLP implementation to date. Because of the need to receive data that are linked among data types and which use non-confidential person identifiers, NMFS needs to receive these data through the Commercial Fisheries Entry Commission (CFEC). ADF&G staff provided the following estimated schedule for reviewed fish ticket data availability from ADF&G to CFEC: data already in the fish ticket database system: within one to two months; data not yet in the system, one to two months for groundfish tickets, and within a month of the date of closure of any specific shellfish fishery. CFEC typically requires up to one month from the date of request to provide NMFS with data sets, depending on work priorities. Any data needed from NMFS' own databases are available within approximately one week.

Groundfish fish tickets for 1999 are the source of data to determine cooperative membership for 2000. These are expected to be available to NMFS between one and two months following the dates of landing. This schedule could prove problematic for co-ops that wish to operate in January 2000 if pollock fisheries extend into late 1999.

Discard data. No reliable source exists for inshore catcher vessel at-sea discards of groundfish and PSC. Additionally, several questions must be answered that will determine the method and relative ease with which discards are calculated and allocated.

First, are discards intended to be part of the individual vessel fishing histories; or at the co-op, sector, or TAC level? The answer depends on the aggregation level at which NMFS intends to "allocate" and manage groundfish and discards.

Second, what is the basis of extrapolating discards? NMFS might elect to calculate groundfish discards based on the retained catch in directed fisheries; or based on retention at any time; based solely on pollock, or on all groundfish species. PSC extrapolations might additionally depend on assignment of "target" fisheries.

Fish tickets are primarily landing documents and information on discards therein is incomplete and unreliable. Another potential data source, NMFS logbooks, are not required for catcher vessels less than 60 feet length overall (LOA); and in any case are not available electronically. The NMFS Weekly Processor Report (WPR) monitoring system uses observer-industry blended data to estimate groundfish discards and PSC bycatch on a weekly basis and for the entire inshore component. Results for the industry are extrapolated to individual processors on a prorated basis according to their groundfish product reports and an assigned "target" for the week, and are not based on, or provided at, the catcher vessel level. A serious difficulty in further extrapolating groundfish and PSC discards to catcher vessels is that fish tickets frequently "straddle" two or more weekly reporting periods (i.e., bases for WPR processor target assignments and blend discard extrapolations). Also, if any such extrapolation is made for establishing catcher vessel histories NMFS will need to establish a basis for the extrapolation (e.g., based on retained pollock or retained groundfish; or on a target fishery assignment). If based on total catch the PSC estimates would themselves be based in part on highly estimated groundfish discards. This is somewhat less of a problem if each co-op is in effect, equivalent to an entity that reported separately in a WPR although extrapolation also is required. The issue of calculating and applying discards

[2] State of Alaska Groundfish Coordinator, Gail Smith. March 1999.

in groundfish fisheries gets progressively more simple as the level of extrapolation and assignment of guideline harvest amounts is made at increasingly aggregated levels.

Basis for historical catch. For the purpose of determining directed pollock harvest histories for individual catcher vessels under section 210(b)(1), NMFS will have to consider the dates during which pollock was open for "directed fishing" in Section 210 (b) as they relate to determining vessel histories during 1995, 1996, and 1997. In particular, NMFS will determine which deliveries made after close of a directed pollock fishery should be included in that directed fishery. For groundfish other than pollock and for prohibited species, NMFS must answer the question of "what is the basis on which harvests are assigned to a vessel: catch or retained catch during the open directed fishery for that species; or any catch or retained catch of that species at any time?"

Data discrepancies. To avoid discrepancies between NMFS and fish ticket data sources resulting from any differences in product recovery rates, reporting compliance requirements, and reporting time frames, NMFS will use only fish tickets to establish both individual vessel harvest histories and to determine the total catch of pollock for the entire inshore component for each year. Blend data is the only source of groundfish discard and PSC data. As described above, extrapolating and apportioning discards and PSC is problematic.

Time and staff resources. Time and staff resources are limited. The process for determining vessel harvest histories for inshore pollock cooperatives is not substantially different from that used for implementing the Individual Fishing Quota Program (IFQ) and License Limitation Program (LLP). Much of the programming infrastructure to examine fish tickets in preparation for LLP can be applied to AFA inshore co-ops with little modification. One criterion for vessel participation in cooperatives is LLP authority to fish for pollock; and that information will expected to be available at the time NMFS needs to establish AFA catcher vessel histories later in 1999. Except for the problem of discard groundfish and PSC, there is no substantial difference in the amount of time or work required to establish a harvest history for all retained groundfish species as compared with that for pollock alone, because a complete fish tickets data set will include all groundfish species. However, it would likely require additional time for participants to rebut the NMFS Record if all species were included; and for NMFS staff to investigate the expected increased number of such instances. This could delay establishment of vessel histories and determinations of cooperative harvests limitations for non-pollock species.

Finally, 1999 deliveries by catcher vessels are needed to establish potential cooperative membership for 2000. Even a small delay in availability of late year 1999 fish tickets could delay final results and consequently, the establishment of co-op membership and allocations and guideline harvest levels for 2000 fisheries.

A significant additional problem is that no staff or consultant resources have been identified to construct or modify the Official Record for this project. Qualified persons are currently fully occupied on other priority tasks to support implementation of AFA, IFQ and IFQ/CDQ Cost Recovery, and LLP implementation.

Confidentiality. As has occurred in other programs, without specific waivers from permit holders who signed fish tickets, Alaska State confidentiality statutes may preclude NMFS' disclosure of vessel histories and subsequent review and opportunity for challenge of the Official Record by current vessel owners, who are presumed to "own" the history. This occurs fairly often.

State statute at AS 16.05.815(a)(5) prohibits the release of fish ticket data to other than the permit holder who signed the fish ticket. The permit holder signing the fish ticket often is not the vessel owner. Thus, vessel owners may not obtain historical fish ticket data for landings by their vessels without a signed waiver from each

permit holder documented on historical fish tickets. The existing limitations on the release of historical fish ticket data can be modified only through action by the Alaska State legislature.

Existing State statute does provide for the release of fish ticket or other confidential information to NMFS and the Council for purposes of fisheries management. NMFS might ameliorate concerns about access to historical landings data by providing each vessel owner the total pounds landed by species for her/his vessel over the relevant catch history period (1995 - 1997). However, NMFS could not provide specific landings data documented on specific fish tickets. Once co-op participants are identified, NMFS also could provide pollock allocations and non-pollock and PSC harvest limitations aggregated to the co-op level. NMFS' determination on co-op allocations will not be available until late in the year after co-op participants have been identified. This approach, therefore, will not address the interest of industry members to obtain historical landings information as soon as possible so the co-op negotiations may be initiated for 2000 immediately after final Council action on an FMP amendment establishing an infrastructure for inshore co-ops.

9.6.2 Annual Pollock Allocations

The formula set out in section 210(b) of the AFA generates a percentage of the annual pollock TAC that each inshore co-op would receive, but this percentage must be converted into a final TAC amount before it can be issued to a co-op by NMFS. As mentioned above, the annual amount of pollock allocated to a co-op would be calculated by summing the pollock "quota share" listed on each participating catcher vessel's fishing permit by the amount of pollock allocated to the inshore component. The resulting co-op pollock allocations would be specified annually.

These annual specification of co-op pollock allocations would be calculated and announced after determination of TACs and submission of catcher vessel membership lists. These allocations could be adjusted if additional vessels join a co-op prior to the beginning of a calendar year. The current process for establishing annual harvest specifications will require co-op allocations of pollock TAC under interim, followed by final, allocations and harvest limitations.

Co-op allocations would need to accommodate two types of harvest or share transfers. First, vessels joining co-ops after initial allocations are calculated and prior to the start of a calendar year (section 210(b)(2)) would bring their pollock "shares" into the co-op. Accommodating this is a simple matter of recalculating the co-op's allocation/limitations. Section 210(b)(6) also authorizes a co-op to transfer up to 10% of its pollock allocation to a shoreside processor eligible under section 208(f) other than the primary shoreside processor to which pollock will be delivered under the co-op agreement. Under section 210(a), these contract provisions would have to be identified prior to the start of a fishing year. Annual co-op specific pollock allocations would be specified accordingly.

At present, the pollock fishery begins on January 20 of each year under interim TACs equal to the proposed first seasonal allowance of pollock for the Bering Sea. Final TAC specifications do not become effective until late February or early March of each year due to the length of the public comment period on the proposed specifications and review required by NMFS. While the time lag between the start of the fishery on January 20 and the effective date of the final specifications is likely to be reduced under the TAC streamlining amendment adopted by the Council in 1998 and under development by NMFS, it is not likely to be completely eliminated. Consequently, if inshore co-op fishing is to begin on January 20, then provisions must be made for interim co-op shares until the final specifications become effective. This problem is not faced by the halibut and sablefish IFQ program because fishing for halibut and sablefish does not begin until March 15 of each year, after the effective date of the final specifications.

9.6.3 Management of Catcher Vessel Sideboards

Section 211 of the AFA states that "the North Pacific Council shall recommend for approval by the Secretary such conservation and management measures as it determines necessary to protect other fisheries under its jurisdiction and the participants in those fisheries, including processors, from adverse impacts caused by this Act or fishery cooperatives in the directed pollock fishery." With respect to catcher vessels, Section 211(c)(1)(A) requires that

> *By not later than July 1, 1999, the North Pacific Council shall recommend for approval by the Secretary conservation and management measures to—*
>
> *(A)* ***prevent the catcher vessels eligible under subsections (a), (b), and (c) of section 208 from exceeding in the aggregate the traditional harvest levels of such vessels in other fisheries under the authority of the North Pacific Council as a result of fishery cooperatives in the directed pollock fishery****; [emphasis added] and*
>
> *(B) protect processors not eligible to participate in the directed pollock fishery from adverse effects as a result of this Act or fishery cooperatives in the directed pollock fishery. If the North Pacific Council does not recommend such conservation and management measures by such date, or if the Secretary determines that such conservation and management measures recommended by the North Pacific Council are not adequate to fulfill the purposes of this paragraph, the Secretary may by regulation restrict or change the authority in section 210(b) to the extent the Secretary deems appropriate,* ***including by preventing fishery cooperatives from being formed pursuant to such section*** *[emphasis added] and by providing greater flexibility with respect to the shoreside processor or shoreside processors to which catcher vessels in a fishery cooperative under section 210(b) may deliver pollock.*

These "sideboard" requirements are different in nature from the allocations of pollock TAC to inshore co-ops under Section 210 of the AFA. First, they are limits and not allocations. The AFA makes no provisions to assure that such catcher vessels actually have the right to harvest other groundfish species at their traditional levels. Second, the AFA specifically states that such management measures apply to the aggregate catch of eligible catcher vessels and not to catch by individual vessels or co-ops. While the Council is not limited to considering sideboard provisions that would apply to the entire AFA catcher vessels fleet in aggregate, the AFA clearly anticipates that such sideboards would be applied in the aggregate.

The AFA also provides the authority to prohibit the formation of inshore fishery co-ops if catcher vessel sideboard provisions are not recommended by the Council by July 1, 1999, or if the Secretary of Commerce determines the Council's recommended sideboard provisions are inadequate to protect other fisheries.

9.6.3.1 Monitoring Sideboards at the Aggregate Sector Level

NMFS currently is monitoring 1999 AFA sideboards in the aggregate for the catcher/processor sector of the pollock fleet. The 1999 sideboards for the catcher/processor fleet were published in the interim and final 1999 specifications and are being managed through directed fishing closures. At the beginning of the fishing year, NMFS closed a suite of BSAI fisheries to AFA-listed catcher/processors because the sideboard amounts for these fisheries were determined to be inadequate to support a directed fishery by the listed C/Ps. Several species such as Pacific cod, rock sole, and yellowfin sole remained open to AFA-listed catcher/processors because the sideboard amounts for those species were adequate to support directed fishing. NMFS is challenged to manage groundfish and PSC sideboard amounts in these fisheries to prevent the AFA-listed catcher processors from exceeding their sideboard limitations.

NMFS could use a similar approach for catcher vessels, closing directed fisheries to AFA-listed catcher vessels when sideboard amounts are inadequate to support directed fishing and leaving directed fishing open for fisheries in which adequate sideboard amounts exist to support directed fishing for those species. Existing observer coverage levels combined with a system of electronic catcher vessel delivery reports should be adequate to monitor the aggregate activity of AFA-listed catcher vessels. In the case of prohibited species, catch by observed vessels would be extrapolated to unobserved vessels fishing for the same species in the same area as is currently being done for all fisheries in which observer coverage is less than 100 percent.

9.6.3.2 Monitoring Sideboards at the Individual Co-op Level

Managing sideboards at the individual co-op level poses significant additional burdens compared to managing aggregate sideboards for the fleet as a whole. In the first place, NMFS cannot possibly manage multiple species sideboards at the individual co-op level through traditional in season management measures such as closures in the *Federal Register*. The responsibility for sideboard management at the individual co-op level would have to be the legal responsibility of the co-op itself and not NMFS, similar to the management of pollock shares by individual co-ops. Second, the monitoring of individual catch limits at the co-op level raises the same monitoring concerns present in the CDQ program and discussed above with respect to the monitoring of pollock shares by co-ops. For this reason, NMFS believes that management of sideboards at the individual co-op level requires the same monitoring and observer coverage levels required by the CDQ program (e.g. 100 percent observer coverage for all trawl vessels greater than or equal to 60 ft LOA and full retention of groundfish catch and salmon PSC). This additional monitoring is especially important for PSC species which are discarded at sea. Extrapolation of PSC rates from observed to unobserved vessels at the co-op level is probably not possible given the small numbers of vessels involved in each co-op and the incentives to misreport PSC catch in the absence of an observer.

Additional complexities arise if vessels in a pollock co-op affiliated with a particular processor wish to deliver non-pollock groundfish to other processors. Tracking sideboard amounts when co-op members are delivering to more than one processor will require that timely reports on catcher vessel deliveries, or electronic shoreside processor logbooks, be in place for all processors to which co-op members wish to deliver groundfish.

9.6.4 Subdivision of Co-op Shares by Area and Season

NMFS, through emergency rule, has recently implemented reasonable and prudent alternatives (RPAs) to avoid the likelihood of the pollock fisheries off Alaska jeopardizing the continued existence of the western population of Steller sea lions, or adversely modifying its critical habitat. Permanent regulations to implement Steller sea lion RPAs are currently under development. These RPAs are likely to further divide the Bering Sea inshore pollock TAC allocation into four separate seasonal allocations with separate catch limits inside a designated critical habitat/catcher vessel operational area (CH/CVOA) conservation zone during each fishing season. Additional spatial distribution requirements may be possible during the summer and fall fishing seasons. Consequently, under the Steller sea lion RPAs, the inshore pollock TAC allocation may be subdivided into between 8 and 12 separate catch limits based on area and season.

Option 1: Managing co-op shares by area and season . If individual co-ops form around all eight of the inshore processors and NMFS subdivides each co-op share by area and season this could generate upwards of 96 separate inshore pollock TAC allocations for the Bering Sea alone. NMFS does not have the capacity to manage dozens or hundreds of individual co-op allocations using traditional in season management methods such as closure notices in the *Federal Register*. Consequently, the burden for managing such co-op shares must be born by the participants themselves as is the case with the IFQ and CDQ programs.

Due to the complexities of implementing this management program within the short time-frame required by the AFA, NMFS is not proposing to implement a more complex system under which each individual inshore cooperative would receive allocations of pollock subdivided by each management area and season. One reason for this decision is that NMFS is currently revising Steller sea lion management measures for 2000 that could divide the Bering Sea Subarea pollock TAC into four seasons and two separate areas. However, a final rule to implement Steller sea lion protection measures has not yet been published and such measures, therefore, cannot be accommodated in this AFA proposed rule. A second reason is that the complexities of managing individual cooperative TAC allocations and accounting for individual cooperative harvest overages and underages by season and area are beyond the scope of this proposed rule. NMFS has not analyzed the observer coverage levels and enforcement burdens such an option would entail.

Option 2 (Preferred): Managing co-op shares in the aggregate. Under the proposed rule, NMFS would manage the inshore cooperative and inshore non-cooperative allocations as two separate inshore fisheries. The various inshore cooperatives would be managed as a group for the purpose of making TAC apportionments by season and area and for the purpose of issuing directed fishing closures. NMFS would continue to announce directed fishing closures for each inshore fishery when the Regional Administrator determines that the TAC allocated to that fishery for a particular season and area has been reached. Under this system, fishing by inshore cooperatives would be unaffected by catcher vessels fishing in the inshore non-cooperative fishery. However, the aggregate harvests by all inshore cooperatives would determine the inshore cooperative directed fishing closures for each season and area.

Under this option, each inshore cooperative would be guaranteed the opportunity to harvest its entire annual allocation of Bering Sea Subarea pollock but would not receive a specific guarantee of harvest levels for any particular season or management area within the Bering Sea Subarea. Cooperatives wishing to further rationalize their annual operations to work with each other to prevent the activities of one cooperative from preempting the harvest plans of another cooperative within a specific season or area.

9.6.5 Data Collection and Verification

To monitor pollock TAC allocations at the inshore co-op level, NMFS must have a reporting system that is able to discern pollock landings by individual catcher vessels. Similar standards also exist to monitor non-pollock groundfish and prohibited species harvest limitations. NMFS has already developed such a system for monitoring CDQ operations and is currently developing an electronic shoreside logbook system that would provide sufficient vessel-by-vessel landing information to monitor inshore co-op activity on a vessel-by-vessel basis. Interagency discussions are also underway regarding possible merger of State and Federal reporting requirements for fish delivered by catcher vessels. A suitable system could be developed by 2000, but would require significant revisions to the existing recordkeeping and reporting program. Serious reservations exist whether implementing regulations would be effective in time for the 2000 A season pollock fishery and a target implementation date for the 2000 B season likely is more reasonable.

If the opportunity to form inshore co-ops is mandated by 2000 and insufficient time exists to implement a new Federal electronic recordkeeping and reporting system to provide timely documentation of catcher vessel deliveries, interim revisions to existing processor logbook and Weekly Production Reports (WPRs) might be considered if non-pollock harvest limitations are monitored at the aggregate sector level. These changes would require separate logbook entries and WPRs for groundfish delivered by AFA-eligible vessels. NMFS notes, however, that even these seemingly minor changes will require significant changes to existing recordkeeping and reporting forms, regulations, and associated software used by NMFS to monitor fishery quotas.

At a minimum, NMFS believes that observer coverage at inshore processors must be increased to a level that would enable each catcher vessel delivery to be observed by a NMFS observer. At most inshore processors, this would require two observers to cover the 24-hour period of operation for the plant. In certain circumstances where an inshore processor is offloading and weighing pollock at multiple locations, more that two observers could be required.

Prior to the AFA, the inshore pollock fishery was managed in the aggregate across the entire sector with NMFS issuing a single closure for the entire inshore sector upon the attainment of a seasonal allocation of pollock TAC. Under the inshore cooperative system set out in the AFA, each inshore processor and its affiliated cooperative will be operating on its own proprietary pollock allocation. Because NMFS will no longer be managing the inshore sector in the aggregate, increased monitoring is required at each individual processor to insure that cooperative allocations are not exceeded. Under a fishery cooperative, contract agreements would be established that essentially allocate specific amounts of pollock to individual vessels for purposes of directed fishing. Although NMFS does not intend to actively manage individual vessel groundfish harvests under the cooperative, the agency is challenged to ensure that overall groundfish or prohibited species catch harvest limitations are not exceeded and that the incidental catch of pollock taken in non-pollock groundfish fisheries is not credited against the pollock directed fishing allowances. To meet these management challenges, NMFS believes that an observer must be available to observe and sample each catcher vessel delivery.

9.6.6 Summary of Co-op Monitoring and Management Issues

Because NMFS does not have the capacity to actively monitor each individual co-op share and announce closures for each individual co-op in the *Federal Register* the responsibility for in season management of co-ops must be born by the co-ops themselves. The individual co-op shares authorized by the AFA are quite similar to current allocations of pollock CDQ to individual CDQ groups. In both cases, an identified group is allocated a specific percentage of the pollock TAC and is responsible for managing its fishing activity to remain within its TAC allocation. NMFS believes, therefore, that it is appropriate and necessary to treat both CDQ groups and inshore pollock co-ops in the same manner with respect to recordkeeping and monitoring.

The extension of multiple species CDQ-type monitoring to catcher vessels participating in inshore-co-ops would depend on whether nonpollock groundfish and prohibited species harvest limitations will be monitored at the sector level (i.e., all AFA-eligible catcher vessels, or all AFA catcher vessels participating in any inshore co-op), or the co-op level. If expectations exist to apportion sideboard limitations to different inshore co-ops and for NMFS to have the capability to monitor these co-op specific limitations, then the monitoring requirements and standards implemented for the MSCDQ program would need to be extended to the AFA co-op vessels as well. The complexity of database requirements and the regulatory infrastructure necessary to support multiple inshore co-ops poses concern about the ability of NMFS to implement such a program in time for the 2000 pollock A season. In the event NMFS is unable to do so, the management of the 2000 pollock fisheries would be similar to that experienced in 1999.

Current recordkeeping and observer coverage requirements for CDQ groups are contained in subpart C of 50 CFR 679. Key elements of the anticipated recordkeeping and monitoring requirements for AFA catcher vessels dependent on whether or not harvest limitations are apportioned at the sector or co-op level are summarized below:

Species Allocation	Monitoring and management standards	
	Allocated at level of multiple co-ops within a sector	Allocated at aggregate level of eligible catcher vessels within a sector
Pollock	Under section 210(b)(1), pollock must be allocated to inshore co-ops if such co-ops are developed. Given that all pollock in a directed fishery must be retained under IR/IU, NMFS expects shoreside landings of pollock to be representative of catch. At a minimum, processors would be required to maintain and submit separate logbook sheets and WPRs for co-op and non co-op deliveries of pollock by AFA-eligible vessels. Ideally, these new reporting requirements would be subsumed under new electronic shoreside logbook software being developed by NMFS that would provide for documentation of vessel-specific deliveries. Co-ops members would be jointly and severally responsible for controlling harvest activity so that pollock allocations are not exceeded.	If coops are formed, pollock must be monitored and managed at the co-op level, triggering the associated monitoring standards described in the adjacent column. Even though inshore co-ops may not be formed in any one year, the infrastructure must be developed in anticipation that co-ops will exist. Thus, the additional recordkeeping and reporting requirements necessary to monitor multiple co-op specific pollock allocations must be developed and implemented by regulation before the opportunity to form co-ops is provided to the inshore sector.

Non-pollock groundfish	Establishment of co-op specific harvest limitations of groundfish would require additional observer coverage and reporting requirements equivalent to the monitoring standards established for the MSCDQ program. These requirements would be as follows based on current regulations governing the MSCDQ program: **Requirement for Co-ops**: Each co-op would be required to submit co-op vessel catch reports for each vessels participating in the coop and fishing for groundfish. These reports would be submitted to NMFS within 7 days after delivery of catch and would document each co-ops harvesting activity relative to specified harvest limitations (See 679.5(n)(2)). Co-ops members would be jointly and severally responsible for controlling harvest activity so that harvest limitations are not exceeded. **Requirements for shoreside processors**: Any processor receiving groundfish from AFA-eligible catcher vessels would be required to have an observer present at all times while AFA-eligible catcher vessels are offloading catch and to submit a delivery reports to NMFS withing 24 hours. The type of information on a delivery report would be similar to that required under 679.5(n)(1), and generally report the identity of the vessel and species specific landed weight and area of harvest. In addition, shoreside processors must notify the observer of the offloading schedule of each groundfish delivery at least 1 hour prior to offloading to provide the observer an opportunity to monitor the sorting and weighing of the entire delivery. **Requirements for catcher vessels $\geq$ 60 ft LOA**: Catcher vessels over 60 ft LOA would carry observers 100 percent of the time when fishing for groundfish and would also (A) retain all groundfish species, and (B) provide space on the deck of the vessels for the observer to sort and store catch samples and a place from which to hang the observer sampling scale. **Requirements for catcher vessels < 60 ft LOA:** Catcher vessels less than 60 ft LOA may not be required to carry an observer. However, operators of catcher vessels less than 60 ft LOA must retain all groundfish.	Establishment of nonpollock groundfish harvest limitations for either all AFA-eligible vessels or only for AFA-eligible vessels that choose to participate in a co-op would require new recordkeeping and reporting requirements for any processor who takes delivery of groundfish from these AFA-eligible vessels. At a minimum, processors would be required to maintain and submit separate logbook sheets and WPRs for deliveries of groundfish by AFA-eligible vessels. Ideally, these new reporting requirements would be subsumed under new electronic logbook software being developed by NMFS that would provide for documentation of vessel-specific deliveries.

Prohibited species	**Requirements for shoreside processors:** Delivery reports of prohibited species required, similar to CDQ reports required at 679.5(n) **Requirements for trawl catcher vessels ≥ 60 ft LOA**: (A) Retain all salmon until they are delivered to a processor, and (B) retain all halibut and crab in a bin or other location until it is counted and sampled by an observer. **Requirements for catcher vessels < 60 ft LOA**. (A) Retain all salmon until they are delivered to a processor: (B) All halibut and crab must be discarded at sea. Operators of catcher vessels using trawl gear must report the at-sea discards of halibut or crab on the processor delivery report and co-op catch report.	Observed bycatch rates from AFA eligible vessels would be used to extrapolate bycatch estimates for the AFA-eligible fleet based on new vessel-specific deliver reports of groundfish for that fleet.

9.7 Requirements for the Inshore Sector to Repay Federal Loan Under AFA

Section 207 of the American Fisheries Act lays out the parameters under which the inshore sector must repay the $75 million Federal loan. The actual language from the AFA is included below:

(b) INSHORE FEE SYSTEM.—Notwithstanding the requirements of section 304(d) or 312 of the Magnuson-Stevens Act (16 U.S.C. 1854(d) and 1861a), the Secretary shall establish a fee for the repayment of such loan obligation which—

(1) shall be six-tenths (0.6) of one cent for each pound round-weight of all pollock harvested from the directed fishing allowance under section 206(b)(1); and

(2) shall begin with such pollock harvested on or after January 1, 2000, and continue without interruption until such loan obligation is fully repaid; and

(3) shall be collected in accordance with section 312(d)(2)(C) of the Magnuson-Stevens Act (16 U.S.C. 1861a(d)(2)(C)) and in accordance with such other conditions as the Secretary establishes.

Repayment of the loan will commence in the year 2000, whether or not the inshore sector is operating under cooperatives. However, benefits derived from cooperatives were likely envisioned to help offset the cost of loan payments.

10.0 ALTERNATIVES FOR THE MONITORING AND MANAGEMENT OF CATCHER/PROCESSORS AND MOTHERSHIPS

On February 4, 1998, NMFS published a final rule establishing performance, technical, operational, maintenance and testing requirements for scales used to weigh catch at sea (63 FR 5836). On June 4, 1998, NMFS published a final rule that established the requirements for observer sampling stations and required the use of scales and observer sampling stations on specified vessels participating in CDQ fisheries (63 FR 30381). Further information on the rationale for, and implementation of, the regulations establishing Equipment and operational requirements for catch weight measurement is contained in the preambles to the final rules. A proposed regulatory amendment that would make minor changes to these equipment and operational requirements is in preparation.

The at-sea scale regulations specify that vessels required to weigh total catch must have two types of NMFS-approved scales on board: a total-catch weighing scale, and an observer sampling scale. For a scale to be approved by NMFS, the manufacturer must apply to NMFS and document that the scale meets the performance and technical standards, contained in Appendix A to Part 679. Scales that meet these requirements are placed on the list of NMFS approved scales. NMFS has approved 9 models of observer-sampling scales, and 5 models of total-catch weighing scales.

Each scale must be inspected annually by a NMFS authorized inspector. An observer-sampling scale inspection takes approximately 30 minutes, a total-catch weighing scale takes three to eight hours. Scales must also be tested daily by the vessel crew when in use. The observer-sampling scale is tested daily by weighing cast iron test weights of a known weight. In order to be acceptable to NMFS, the observer-sampling scale must be accurate within 0.5 percent. The total-catch weighing scale is tested daily by passing at least 400 kg of test material (either fish or sand bags) across the scale and then weighing the test material on the observer sampling scale. The total-catch weighing scale must be accurate within 3 percent when compared against the observer platform scale. Scales that do not pass the annual inspection or daily test may not be used to weigh catch at-sea.

Since July 1, 1998, 39 observer platform scales and 23 total catch weighing scales have been inspected and approved. During 1998, approved total-catch weighing scales were used in MS-CDQ fisheries by 6 vessels that fished 60 vessel days.

The AFA requires the 20 listed catcher/processors to weigh total catch from all fisheries on a NMFS-approved scale. Catcher/processors that intended to harvest fish under the CDQ program during 1999 were required to start weighing total catch on January 1, 1999. Listed catcher/processors that do not intend to harvest fish under the CDQ program will be required to weigh total catch beginning January 1, 2000.

When an observer sampling station is required, it must be approved by NMFS and meet specifications for size, construction, location and required equipment. Sampling stations on trawl catcher/processors and motherships must provide a working area at least 1.8 m wide by 2.5 m long near where the observer samples unsorted catch. The station must be equipped with a table, an observer sampling scale, floor grating, adequate lighting and a water supply. Prior to being used and annually thereafter, the sampling stations must be inspected by NMFS staff. If requested to do so, NMFS staff will conduct pre-inspections of sampling stations to help the vessel owners better comply with the regulations. NMFS staff normally require between one and two hours to conduct a sampling station inspection. To date, NMFS staff have conducted 40 sampling station pre-inspections and 37 station inspections. The stations on 36 boats have been approved.

In that the AFA requires the listed catcher/processors to weigh total catch and to carry two observers, the requirements are very similar to those for trawl catcher/processors that participate in CDQ fisheries. However, the AFA does not require that the listed processors provide an observer sampling station, nor are the 3 listed motherships required to weigh total catch or carry two observers.

The number of vessels impacted by this action is summarized in Table 10.1

Table 10.1 Number and type of vessels that may be impacted as a result of this action.

	Vessels without NMFS-approved scales or stations*	Vessels with NMFS-Approved scales or stations*	Total
AFA catcher/processors	8	12	20
AFA motherships	1	2	3
Non AFA trawl catcher/processors	21	9	30

* One of these vessels has an approved scale but does not have an approved sampling station

10.1 Alternatives for Expanded Scale and Sampling Station Requirements

Alternative 1. (Status Quo) Do not require AFA catcher/processors or motherships to weigh all catch, carry two observers or provide an observer sampling station.

Alternative 2A. Require AFA listed catcher/processors to weigh all catch, carry two observers and provide an observer sampling station. Do not expand these requirements to include AFA listed motherships.

Alternative 2B. (Preferred Alternative) Require AFA listed catcher/processors and motherships to weigh all catch, carry two observers and provide an observer sampling station.

Both alternative 2A and 2B would require AFA-listed catcher/processors to weigh total catch. Alternative 2B would require AFA listed motherships to weigh total catch as well. Many of the AFA-listed processors already have NMFS approved scales, in most cases because they plan to participate in CDQ fisheries during 1998.

An approved observer sampling scale costs approximately $7,000 and an approved total-catch weighing scale costs approximately $45,000. Past scale installations have, in many cases, required factory alterations. Most of these have been done in conjunction with the installation of an observer sampling station. If a station were not being installed at the same time, the cost to reconfigure the factory where needed and install a scale would range from 0 to $10,000.

Vessels that are required to weigh total catch depend on the continued operation of the scale. If the scale breaks down and cannot be repaired, or if the scale is unable to pass the daily test, the vessel must stop fishing and return to port. The magnitude of this impact would be a function of the frequency of scale breakdowns that could not be repaired at sea. During pollock A1, there were 11 reported scale problems, 8 of these affected the scales ability to weigh accurately, but only one could not be repaired at sea and was repaired in Dutch Harbor. If this breakdown rate continues, and a repair trip to Dutch Harbor lasts 3 days, the AFA vessels can

expect to lose about 17 days per year. Both manufacturers have been responsive to problems as they develop and seem to be doing an excellent job of preventing problem reoccurrence. As boat operators learn how to operate and maintain the scales, and as manufacturers solve problems, the frequency of scale breakdowns should decrease.

Vessel operators are required to test the total-catch weighing scales daily. This test can be done either with fish or an alternative material supplied by the scale manufacturer. As part of the original PRA submission for the scales program, NMFS estimated that this test would require approximately 45 minutes per day. This estimate appears to be accurate for vessels testing scales with fish. Those boats that have chosen to use sand bags have reduced the test time to as little as 10 minutes.

10.2 Expanded Observer Coverage Requirements

All AFA listed C/Ps are currently required to carry at least one observer when fishing off Alaska. Processors vessels participating in CDQ fisheries and motherships taking deliveries of pollock from the CVOA during portions of the B season must also carry two observers. Alternative 2A would require the 20 listed catcher/processor vessels to carry 2 observers at all times. Based on data from 1998, the 20 listed catcher/processors carried observers a total of 3,395 days. Assuming that these vessels were carrying two observers when participating in CDQ fisheries, two observers were carried during 486 of those days and one observer was carried during the remaining 2,909 days. If 1998 data are reflective of fishing patterns under the AFA, these vessels would be expected to require an additional observer during 2,909 days. At an estimated cost of $250 per observer day, this would cost the AFA catcher/processors $727,250/yr.

The preferred alternative would require the AFA listed motherships to carry 2 observers throughout the fishing year. Based on data from 1998, the 3 listed motherships carried observers a total of 489 days. Assuming that these vessels were carrying two observers throughout the pollock B season and when taking CDQ deliveries, the motherships were carrying two observers during 304 of those days and were only carrying one observer during 185 of those days. If 1998 data are reflective of fishing patterns under the AFA, these vessels would be expected to require an additional observer during 185 days. At an estimated cost of $250 per observer day, this would cost the AFA motherships $46,250/yr.

Impacts of the preferred alternative are summarized in Table 10.2

Table 10.2 Summary of the costs of the preferred alternative for monitoring C/Ps and motherships.

	Cost per boat	AFA C/Ps with scales/stations	AFA C/Ps without scales/stations	AFA Mships
Platform scale purchase	$7,000	0	$56,000	$7,000
Total-catch weighing scale purchase	$45,000	0	$360,000	$45,000
Scale installation	$0 to $10,000	0	$40,000	$5,000
Observer Sampling station installation	$4,000 to $12,000	0	$72,000	$8,000
Lost fishing days due to scale failure	0.75 days lost per 100 days	17 days/yr		1.5 days/yr
Time for daily scale test	0.75 hrs/day	1208 hrs/yr		191 hrs/yr
Time for annual scale inspection	8 hrs/yr	160 hrs/yr		24 hrs/yr
Time for annual station inspection	7 hrs/yr	140 hrs/yr		21 hrs/yr
Cost of second observer	$250/day	$727,250/yr		$46,250/yr

10.3 Cost to NMFS

The State of Alaska, Division of Measurement Standards has a contract with NMFS to conduct scale inspections in Dutch Harbor and Seattle. Scale inspections are also conducted by NMFS staff. To date, 23 total-catch weighing scales have been inspected. To date, inspections have cost approximately $2,000 per inspection. Based on theses costs, the addition of AFA catcher/processors that do not fish CDQ should increase the number of scales inspected by about 9 boats, or $18,000/yr. The cost per inspection should be considerably lower in future years as NMFS gains experience with the program. Observer sampling stations are inspected by existing NMFS staff and the costs associated with inspecting an additional 10 vessels would not be expected to be significant.

11.0 COUNCIL'S PREFERRED ALTERNATIVES

At the June 1999 Council meeting in Kodiak, the Council identified their preferred alternatives for the AFA harvester sideboard provisions. Preferred alternatives for several other AFA related issues, such as the determination of inshore pollock catch histories, and clarification of definitions used in the AFA, were also identified (Section 11.5 contains the actual motion as passed by the Council). This chapter will provide a description of those alternatives as well as additional information on their impacts. In some cases similar information can be found in other chapters of this document. Other required provisions of the Act, such as scale and observer requirements, cooperative structures, and crab processing sideboards were not the result of Council decisions, but were mandated by the AFA itself, or were clarified by Council action in October 1999. Adjustments to some of the June actions, particularly with regard to sideboard exemptions for catcher vessels, were made in December 1999.

The Council elected not to finalize their preferred alternatives for groundfish processing sideboards. Groundfish processing sideboards will be considered by the Council in April 2000, along with alternatives for BSAI pollock excessive processing sharecaps.

Two general statements were issued by the Council regarding sideboard harvest caps. The first was a statement that the Council requested NMFS to manage all fisheries such that sideboard and PSC caps are not exceeded. Preliminary information on how NMFS intends to manage the caps is provided later in this chapter. The second directive was that all sideboard calculations for groundfish, crab, and scallops be based on the best estimate of landed catch. Landed catch excludes all catch history where fish were discarded at-sea. Landed catch was used for all sideboard cap estimates included in this chapter.

11.1 Catcher/Processor Harvest Sideboards

The Council preferred alternatives for catcher/processor sideboards differs from those in place for 1999. For 1999 the catcher/processor sideboards were based on the total catch of all 29 catcher/processors in the non-pollock target fisheries, and were expressed as a percentage of the aggregate total allowable catch for the years 1995-97. For 2000 and beyond, the sideboards are based on the landed catch of the 29 catcher/processors in all target fisheries. This alternative does not give credit to catcher/processors for catch that was discarded, but they are given credit for the catch of non-pollock species that was retained in pollock target fisheries.

Section 211 of the AFA required the Council to protect non-AFA vessels from adverse impacts resulting from BSAI pollock cooperatives. Several methods were considered to limit the AFA fleet's harvest in other fisheries to meet this mandate. After much debate over several meetings, the Council opted to use landed catch to represent the catcher/processors' catch history when determining sideboards. Obviously, using landed catch will result in smaller sideboard caps than had total catch been used. Using landed catch may also affect the number of directed fisheries that NMFS will open to the catcher/processor fleet. However, this will only occur in cases where the amount of a species that was discarded by the AFA catcher/processors would have provided enough additional history such that NMFS would deem the amount adequate to open a directed fishery for that species.

The Council also felt that giving catch history credit for discarded fish would not set a good precedent. The Magnuson-Stevens Act mandates that the Council work towards reducing discards. This subject was debated as the Council made their final decision. Some members of the Council argued that discards may increase if the AFA vessel's sideboard caps were reduced. They basically argued that the AFA fleet had lower discard rates than the non-AFA fleet which would have increased TAC at their disposal under this alternative.

However, other members of the Council argued that discards would decrease. Table 11.1 shows a comparison of the discard rates of the AFA and non-AFA catcher/processor trawl fleets. The AFA catcher/processors have lower discard rates for most of the species in which they will likely have directed fisheries. AFA catcher/processors generally have higher discard rates for species that will not be open to directed fishing. Because of the fisheries that will be open to directed fishing and NMFS management of AFA sideboards, it is likely that discards will not increase, and may decrease under this sideboard system.

The catcher/processors will still have directed fisheries for species that they were targeting in the past, even though the amount they will be allowed to catch under a cap will be reduced. Table 11.1 shows that the Pacific cod sideboards will be reduced by 28 percent, yellowfin sole 20 percent, rock sole 65 percent, and flat head sole 74 percent, relative to using total catch. The Atka mackerel fisheries in the Aleutian Islands areas will be based on the formula outlined in the AFA, so landed catch will not be used to determine sideboard caps in those fisheries. The higher historic discard rates in the other flatfish and rock sole fisheries may reduce the sideboard caps to a level that would not support a directed fishery. It is also likely that they will not have directed fisheries for other species they harvested, but mostly discarded in the years 1995-97.

Table 11.1: Trawl Catcher/Processor Discard Rates in BS/AI, 1995-97

	Catcher/processors	
Species - Area	AFA	Non-AFA
Atka Mackerel - Central Aleutian Islands	3%	19%
Atka Mackerel - Eastern Aleutian Islands	78%	13%
Atka Mackerel - Western Aleutian Islands	5%	17%
Arrowtooth Flounder - Bering Sea and Aleutian Islands	97%	90%
Other Flatfish - Bering Sea and Aleutian Islands	74%	69%
Flathead Sole - Bering Sea and Aleutian Islands	74%	33%
Greenland Turbot - Aleutian Islands	30%	13%
Greenland Turbot - Bering Sea	54%	18%
Other Species - Bering Sea and Aleutian Islands	90%	99%
Pacific Cod (Trawl Gear, Catcher Processor Vessels) - BSAI	28%	30%
Pacific Ocean Perch - Aleutian Islands	43%	15%
Pacific Ocean Perch - Bering Sea	87%	12%
Pacific Ocean Perch - Central Aleutian Islands	97%	18%
Pacific Ocean Perch - Eastern Aleutian Islands	62%	16%
Pacific Ocean Perch - Western Aleutian Islands	65%	18%
Other Rockfish - Aleutian Islands	82%	55%
Other Rockfish - Bering Sea	90%	58%
Rock Sole - Bering Sea and Aleutian Islands	65%	53%
Sablefish (Trawl Gear) - Aleutian Islands	61%	21%
Sablefish (Trawl Gear) - Bering Sea	10%	9%
Sharpchin/Northern Rockfish - Aleutian Islands	92%	69%
Squid - Bering Sea and Aleutian Islands	92%	70%
Shortraker/Rougheye Rockfish - Aleutian Islands	44%	17%
Other Red Rockfish - Bering Sea	96%	26%
Yellowfin Sole - Bering Sea and Aleutian Islands	20%	22%

Source: NMFS Blend data for 1995-97.

Reductions[3] in net revenues to these vessels caused by changes in sideboard caps cannot be determined with the data currently available. However, given the discard rates of species taken as bycatch, the revenue losses will likely result from reductions in the sideboard caps in the Pacific cod, yellowfin sole, rock sole, and flat head sole harvests. Any revenue losses by this group of vessels would be offset by gains by non-AFA vessels, in an overall context. This assumes that the Non-AFA vessels would retain these "extra" fish at the same rate, or higher, than the AFA fleet would have.

Several other alternatives were considered by the Council to represent the catcher/processor fleets' historic participation in the BSAI groundfish fisheries. These alternatives are described in Chapter 6.

11.1.1 Estimates of Catcher/Processor Sideboards

Estimates of the catcher/processor sideboard amounts are provided in Table 11.2. Information on the total catch of these species, which includes catch that was discarded, can be found in Table 6.2 of Chapter 6, but is also repeated here. Table 11.2 shows that for some species (many of the flatfish species and squid are good examples) the amount of catch that was landed is quite small when compared to the total catch.

Estimates of the value of these fisheries were also provided in Table 11.2. Those estimates, based on 1997 prices, indicate that the caps would be valued at about $13 million ex-vessel. This value underestimates the total value of these fish to catcher/processors because the value they add to the fish through processing is not included. On the other hand, it is unlikely that all of these fish would be processed. Determining what proportion would be processed is difficult, especially given the structural changes in the pollock fishery. Therefore, an attempt to estimate first wholesale value will not be included..

Based on these cap levels, it is likely that NMFS will only open directed fisheries for Atka mackerel, Pacific cod, and yellowfin sole. Perhaps directed fisheries will be opened for flathead sole, rock sole, and other flatfish. It is unlikely that there is an sufficient amount of any other species to open a directed fishery. However, the actual directed fisheries will not be determined until NMFS estimates the year 2000 sideboard amounts. Once that estimate is made, NMFS will calculate bycatch needs for other fisheries, and if an adequate amount of a species is left over, a directed fishery for that remainder can be opened. Fisheries will not be opened if the entire sideboard cap is expected to be harvested as bycatch in other directed fisheries.

[3]Note that these are only "potential" revenue changes, since these fish were not previously retained, when doing so was an option. The decision to "retain" or "discard" in the future, in the absence of this proposed action, would have turned on market and operational decisions which we have more way of assessing. It seems "unlikely" that 100% of the fish voluntarily discarded historically, would not be "retained", if the action so allowed. So the "potential" revenue loss is certainly less that the equivalent value of the (now) foregone bycatch of these species. It does not necessarily follow, however, that the reductions in "retainable" bycatch in the afa sector will translate into equivalent "gains" in retained catch in the non-afa sector. This seems to be so because, 1) the afa boats will still bycatch (but may not retain) some of this fish, and 2) the non-afa boats were discarding these species at generally higher rates than the afa operations, before this action.

Table 11.2: Estimates of Catcher/Processor Groundfish Sideboards Resulting from the Council's Preferred Alternative (Landed Catch/TAC).

Species/Area TAC Groupings	Years 1995-97 Available TAC	Total Catch	Landed Catch	Landed Catch/ TAC	1999 TAC	Estimated Cap (mt) Based on 1999 TAC	Ex-Vessel Price ($/Lb)	Value ($ Millions)
Atka Mackerel - Central AI*	103,100	23,138	22,543	11.5%	10,360	1,191	$0.05	$0.14
Atka Mackerel - Eastern AI	55,200	803	177	0.3%	7,784	25	$0.05	$0.00
Atka Mackerel - Western AI*	94,557	9,636	8,991	20.0%	12,487	2,497	$0.05	$0.29
Arrowtooth Flounder - BSAI	36,873	2,688	76	0.2%	114,201	237	$0.04	$0.02
Other Flatfish - BSAI	92,428	12,607	3,243	3.5%	130,900	4,593	$0.09	$0.91
Flathead Sole - BSAI	87,975	7,435	1,925	2.2%	65,705	1,438	$0.13	$0.40
Greenland Turbot - AI	6,839	33	23	0.3%	2,525	8	$0.28	$0.00
Greenland Turbot - BS	16,911	265	121	0.7%	5,126	37	$0.28	$0.02
Other Species - BSAI	65,925	5,599	553	0.8%	27,931	234	$0.03	$0.01
P. Cod (C/Ps)-BSAI (97 only)	51,450	17,205	12,424	24.1%	38,475	9,290	$0.21	$4.30
POP - Bering Sea	5,760	91	12	0.2%	1,190	2	$0.07	$0.00
POP - Central AI (96 & 97 only)	6,195	112	3	0.0%	3,561	2	$0.07	$0.00
POP - Eastern AI (96 & 97 only)	6,265	141	53	0.9%	3,173	27	$0.07	$0.00
POP - Western AI (96 & 97 only)	12,440	356	126	1.0%	5,753	58	$0.07	$0.01
Other Rockfish - AI	1,924	97	18	0.9%	583	5	$0.47	$0.01
Other Rockfish - BS	1,026	47	5	0.4%	314	1	$0.47	$0.00
Rock Sole - BSAI	202,107	17,888	6,317	3.1%	102,000	3,188	$0.15	$1.03
Sablefish (Trawl Gear) - AI	1,135	0	0	0.0%	293	0	$1.77	$0.00
Sablefish (Trawl Gear) - BS	1,736	9	8	0.4%	569	3	$1.77	$0.01
Sharpchin/Northern Rockfish-AI	13,254	1,034	83	0.6%	3,913	25	$0.23	$0.01
Squid - BSAI	3,670	877	73	2.0%	1,675	33	$0.04	$0.00
Shortraker/Rougheye Rockfish-AI	2,827	75	42	1.5%	625	9	$0.23	$0.00
Other Red Rockfish - BS	3,034	174	8	0.3%	227	1	$0.23	$0.00
Yellowfin Sole - BSAI	527,000	125,010	100,192	19.0%	176,783	33,610	$0.08	$5.78

* Atka mackerel percentages defined in the AFA are included as opposed to the historic catch ratio
Source: NMFS Blend data 1995-97 for catch and 1997 PACFIN reports for ex-vessel prices (the most recent year currently available.

11.1.2 Management of Catcher/Processor Sideboards

Though the final regulations have not yet been drafted, it is likely that NMFS will manage the caps through directed fishery closures. NMFS will evaluate the cap amounts at the start of the fishing season to determine if adequate amounts of a species are available for a directed fishery. Should NMFS determine that sufficient amounts are not available, then the directed fisheries for those species will closed for the entire year. If a sufficient amount of a species is available to the catcher/processor fleet, a directed fishery for that species would be opened. Once the portion of a cap to be harvested in a directed fishery is reached, the directed fishery for that species will be closed. Directed fishery limits might be considered "hard" caps, in that when reached they close a directed fishery. Species caught as bycatch, and not part of a AFA catcher/processor directed fishery, will likely be managed as "soft" caps, meaning that reaching a sideboard cap for a bycatch species

(such as squid) in a directed fishery (such as pollock) would not close the directed fishery, so long as no other overfishing levels were reached for the species taken as bycatch.

NMFS is considering managing the sideboard fisheries in the above manner to prevent closures of all directed fisheries after reaching one of the small sideboard caps. Squid taken as bycatch in the pollock fishery is a good example, but other species may also shut down the directed groundfish fisheries if reaching a bycatch species cap closes a directed fishery. According to Table 11.2, about 290 mt of squid were taken annually in the pollock fishery between 1995-97. Our estimate of the catcher/processors' squid cap is 33 mt, based on 1999 TACs. Assuming that all of the squid is taken in the pollock fishery and similar squid bycatch rates continue into the future, only about 35 percent of the catcher/processors' pollock allocation would be harvested before they reach their squid cap. However, given the current understanding of how NMFS intends to manage the fishery, reaching the cap of 33 mt. would not close the directed pollock fishery or any other directed fisheries where squid is taken as bycatch by the AFA catcher/processor fleet. Instead NMFS would not open a directed fishery for squid at the beginning of the year, because insufficient amounts of that species would be available. Not opening a directed fishery for squid will have little economic impact on the fleet, because, at present, market conditions have not lead to the development of directed fishery for squid in the BSAI.

11.1.3 Catcher/Processor PSC Sideboard Caps

Total PSC cap for listed vessels will be established based on the percentage of PSC removals in the non-pollock groundfish fisheries during 1995, 96, and 97. This information was presented in Table 6.13, and is how the AFA catcher processor fleet's PSC bycatch amounts were calculated for 1999. According to estimates published by NMFS in the March 11, 1999 Federal Register, the AFA catcher/processors will be capped at 8.4 percent of the halibut PSC available to trawl vessels, 1.2 percent of the herring, 0.7 percent of the red king crab, 15.3 percent of the *C. opilio* crab, 14.0 percent of the zone 1 *C. bairdi* crab, and 5.0 percent of the zone 2 *C. bairdi* crab. These percentages will be multiplied by the 2000 and beyond trawl PSC caps to determine the amount of each PSC species that the AFA catcher/processors will be allowed to harvest in the non-pollock target fisheries. If the overall trawl PSC caps are not reduced substantially in future years, these PSC bycatch amounts should allow the AFA catcher/processors to harvest their directed fishery allocations, since they are based on the historical catch rates.

The Council also provided the following direction on management of the PSC caps:

1 The Council requested that NMFS manage the PSC sideboard caps to allow for directed fishing of non-pollock species such that the total PSC removals do not exceed the PSC caps.

2. The listed vessels' PSC caps will not be apportioned by fishery and will be managed under open access season apportionment closures.

Additional information on the management of the PSC caps can be found in the proposed rule for this amendment package.

11.1.4 Catcher/Processor Sideboard Summary

The Council's preferred alternative does not change the PSC sideboard caps from those in place for the 1999 fishing year. Catcher/processors will continue to be capped at the same percentage of each future year's PSC allotments, as they were in 1999. Given that they were able to successfully conduct their non-pollock fisheries

in 1999, they should have adequate amounts of PSC species in future years, so long as the overall PSC caps are not reduced by a significant amount.

Groundfish sideboard caps are based on landed catch in all target fisheries under the Council's preferred alternative. The 1999 groundfish sideboard caps were based on total catch in the non-pollock target fisheries. Using the 1999 TACs, the reduction in sideboard caps would be 12,555 mt. of other flatfish, 7,580 mt. of yellowfin sole, 4,258 mt. of rock sole, and 829 mt. of Pacific cod. These reductions may result in NMFS not opening directed fisheries for other flatfish and rock sole.

11.2 Catcher Vessel Harvest Sideboards

Catcher vessels that are AFA eligible are subject to harvest limits referred to in this analysis as "sideboards". Sideboard limits have been constructed based on the historic catch of AFA eligible catcher vessels in the BSAI groundfish fisheries (excluding pollock which was allocated under the AFA), GOA groundfish, BSAI crab species, and the scallop fisheries which are managed under the Council's Fishery Management Plans. **Some vessels are exempted from certain sideboard limits. The Council also expressed their intent that vessels not be allowed to lease their BSAI pollock if they fish in the GOA and are exempt from the GOA sideboard provisions.**

11.2.1 Crab Sideboards

Crab Sideboards shall apply to all AFA vessels regardless of whether they join a cooperative or not. The Council considered exempting AFA eligible catcher vessels that did not join a cooperative from the crab sideboard caps, but ultimately decided that they should apply to all AFA eligible catcher vessels. This will ensure that vessels benefitting from the AFA will be restricted by sideboards. However the catcher vessels that have smaller pollock catch histories, and therefore may be less inclined to join a cooperative, will be most adversely impacted by this decision. That being said, there is no way to determine which vessels would have joined a cooperative if they had not been bound by the sideboards. Several factors, including internal cooperative negotiations on pollock harvest amounts and the compensation for pollock delivered to catcher/processors would impact that decision.

AFA sideboard provisions also prohibit the sale, lease, transfer or stacking of crab LLP licenses or endorsements by AFA-eligible catcher vessels. The Council intended this provision to limit the use of crab licenses earned on AFA catcher vessels, and provide additional protection for the non-AFA crab fleet. Without this restriction the AFA vessels would have had the opportunity to sell their license package and obtain a groundfish only license. The crab portion of their old license, if sold to a non-AFA vessel, would then have been allowed to fish crab outside of the sideboard restrictions. Allowing these types of transfers could have potentially increased effort in the crab fisheries contrary to the intent of the AFA.

11.2.1.1 Bristol Bay Red King Crab (BBRKC)

AFA catcher vessels that hold a BBRKC endorsement shall be capped at their five-year (91-97, excluding 94-95) weighted average share of that fishery. The sideboard cap will be calculated by summing the AFA catcher vessel's total catch during the five qualifying years and dividing that amount by the total catch of BBRKC during those years. Based on ADF&G fishticket data, the total amount of BBRKC harvested by the AFA vessels during the five qualifying years was about 4.8 million pounds. The total catch of all vessels during those years was about 37.7 million pounds. The 41 qualified AFA catcher vessels would be capped at approximately 12.8 percent of each future year's pre-season BBRKC GHL, based on these catch rates.

The GHL for the 1998 BBRKC fishery was 16.4 million pounds. If this GHL level was maintained in the future, the AFA fleet would be capped at about 2.1 million pounds. At the $2.60 per pound reported by ADF&G (from ADF&G commercial fisheries web page, August 27, 1999) for the 1998 fishing season, that equates to about $5.5 million.

ADF&G intends to manage the AFA vessels based on the aggregate cap equally apportioned to each vessel. Specifically, they intend to set a trip limit for each vessel equal to the AFA sideboard cap divided by the number of AFA vessels registered to participate in the BBRKC fishery that year. Based on data presented earlier, the trip limit would be about 51,000 pounds or about $135,000 per vessel. A trip limit of that amount is more than the average vessel harvests in the years 1996 (42,000 pounds and $109,000) or 1997 (33,000 pounds and $86,000). Equal trip limits will ease the in-season management burden on ADF&G, and will allow each vessel to know prior to fishing how much crab they are allowed to harvest. Specific measures dealing with overages and other management issues are still being developed, and cannot be reported at this time.

11.2.1.2 *C. opilio* Crab

AFA eligible catcher vessels which are also LLP qualified for a Tanner crab endorsement may participate in the BSAI *C. opilio* crab fishery if they harvested opilio crab in more than 3 of the 10 years (88-97). If a vessel did fish for opilio crab in at least four years they are eligible to participate in that fishery without further restrictions on the amount of opilio crab they can harvest in a year. Preliminary estimates indicate that five AFA catcher vessels fished at least four years in the opilio fishery, and are therefore allowed to continue participating in that fishery under the AFA sideboard restrictions. Appendix III to this document contains a separate analysis titled "Economic Reliance on Crab by AFA Section 208 Crossover Vessels: Implications for Sideboards," which was prepared under contract to Dr. Scott Matulich of Washington State University. That report details the activities of vessels in the three major crab fisheries (opilio, bairdi, and Bristol Bay red king crab) over 10 years (1988-97) with particular emphasis on the "crossover" vessels, i.e., those which are AFA qualified and also crab LLP qualified. The Council reviewed that information and considered the participation patterns therein in structuring sideboards for all crab fisheries.

11.2.1.3 *C. bairdi* Crab

Sideboard restrictions on the *C. bairdi* crab fishery excludes AFA qualified vessels that receive an LLP Tanner crab endorsement from participating in the directed bairdi fishery, unless they had catch history in the bairdi fishery in 1995 or 1996. If eligible, these vessels will be allowed to participate in the fishery only after the bairdi rebuilding goal is reached. Preliminary data indicates that 21 vessels would qualify to participate in the directed bairdi fishery based on their 1995 and 1996 history. These vessels will be capped at their aggregate historic catch levels based on the years 1995-96. Initial estimates indicate that the AFA catcher vessels would be limited to about 6.5 percent of the pre-season GHL once the fishery is rebuilt. The time frame for rebuilding this stock is difficult to predict. However the rebuilding plan outlined in Amendment 11 to the BSAI crab FMP indicates that a reasonable rebuilding period to meet the minimum stock size threshold may be in the range of the years 2005 to 2010 (NPFMC, 1999[4]). This time frame is after the current version of the AFA is scheduled

[4]North Pacific Fishery Management Council (NPFMC). 1999. A Rebuilding Plan for the Bering Sea *C. bairdi* Stock. Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for proposed Amendment 11 to the Fishery Management Plan for the King and Tanner Crab Fisheries in the Bering Sea/Aleutian Islands and a regulatory amendment to the Bering Sea/Aleutian Islands Groundfish Fishery Management Plan. North Pacific Fishery Management Council, Anchorage, AK.

to expire, meaning it is likely that there will be no fishing for bairdi by any vessels prior to the expiration of the AFA on December 31, 2004.

AFA catcher vessels which hold an LLP Tanner crab endorsement may retain bycatch of bairdi, if retaining bairdi bycatch is allowed in the BBRKC fishery. Allowing the BBRKC vessels to retain bycatch amounts of bairdi has occurred in past years, when the fisheries were opened simultaneously. Such a provision will help reduce the amounts of bairdi crab that are discarded.

11.2.1.4 St. Matthew Blue King Crab

AFA vessels which hold a LLP endorsement for the St. Matthews king crab fishery, and had a landing in that fishery in 1995, 96 or 97, may participate in that fishery under the AFA sideboard restrictions. Only one vessel participated in St. Matthew blue king crab fishery in any of the three qualifying years. Because only one vessel is qualified, the catch history of that vessel cannot be reported under current confidentiality requirements.

11.2.1.5 Pribilof Red and Blue King Crab

AFA catcher vessels which hold an LLP endorsement for the Pribilof king crab fishery, and had a landing in that fishery in 1995, 96 or 97, may participate in that fishery under the AFA sideboard restrictions. Initial information indicates that four vessels will qualify to participate in this fishery under AFA sideboards. These vessels will be allowed to harvest about 1.2 percent of the combined pre-season GHLs, according to preliminary information. This would result in the four eligible vessels in the AFA fleet being capped at 15,600 pounds ($32,700), based on the 1998 GHL and ex-vessel prices. On average the vessels participating in the Pribilof king crab fisheries averaged 17,200 pounds in 1996 and 23,900 pounds in 1997. If the 15,600 pound cap were equally divided it would result in each vessels taking 3,900 pounds ($8,150), or about one-fifth what the average vessel harvested in the 1996 and 1997 fisheries. This is a loss of about $42,000 for AFA catcher vessels, however, that revenue will be redistributed to the Non-AFA crab vessels.

11.2.1.6 Aleutian Islands Red and Brown King Crab

An LLP and AFA qualified catcher vessel which had a landing in the last two years the Aleutian Islands red king crab and brown crab fisheries were open may participate in those fisheries. According to preliminary data no AFA vessels met this criteria, and therefore, no AFA vessels will be allowed to participate in these fisheries under the sideboard restrictions.

11.2.2 Scallop Sideboards

Measures restricting AFA catcher vessels, which participate in a cooperative, to their aggregate traditional harvest in the scallop fishery were developed by the Council. The groundfish and crab sideboards applied to all vessels regardless of whether they participated in a cooperative. It was assumed that scallop sideboards applied only to vessels that did join a cooperative because participation in a cooperative was explicitly defined by the Council.

Participation in a cooperative is defined as any use of a vessel's catch history by a cooperative, whether by direct harvest, lease, sale, or stacking of quota. The preferred alternative would limit the one AFA catcher vessel that also participated in the scallop fishery to the 3.33 percent of the upper end of the statewide GHL. That percentage will be multiplied by the upper end of the state-wide guideline harvest level, in future years, to determine the actual amount of scallops it will be allowed to harvest under a cap. A projected 1,200,000

pound GHL would result in the vessel being capped at 41,292 pounds. At an ex-vessel value of $5.50 per pound (1998 average from ADF&G web site), this equates to a cap of about $227,000 for the scallop vessel.

11.2.3 Bering Sea and Aleutian Islands Catcher Vessel Sideboards

Separate groundfish sideboard structures were developed for the BSAI and GOA. This section of the document will focus on the Council's preferred alternatives for the BSAI. Discussions of the GOA sideboard restrictions will follow in the next section.

11.2.3.1 BSAI Groundfish Sideboard Caps

BSAI sideboards shall be based on the AFA catcher vessel's catch history from 1995-97 (except Pacific cod which will be based on 1997 only and POP which is based on 1996-97). Sideboards will include non-pollock catch history in both the pollock and non-pollock target fisheries. The harvest will then be expressed as a ratio of the AFA vessels' catch to the total amount of TAC available those years. The resulting percentage will be multiplied by the TAC's set in future years to determine the actual amount of each sideboard species that can be harvested under the caps.

The Council recommends NMFS to determine the bycatch needs for the pollock and non-pollock fisheries and allow for directed fishing of non-pollock target species such that the total catch of those species should not exceed the sideboard caps. A discussion of how NMFS intends to manage the caps was provided in the catcher/processor section of this chapter.

The Council intended that catcher vessel sideboard caps apply to all AFA vessels eligible under sections 208(a)-(c) of the Act regardless of participation in a cooperative. Any vessel determined by NMFS to be eligible to participate in a cooperative will be bound by the sideboard caps outlined by the Council, if implemented by the Secretary of Commerce. The Council considered applying these caps only to vessels which participate in a cooperative. However, the Council felt that based on the direction given in section 211(c)(1)(A) of the Act, which states that the Council shall recommend measures to "prevent the catcher vessels eligible under subsections (a), (b), and (c) of section 208 from exceeding in the aggregate the traditional harvest levels of such vessels in other fisheries under the authority of the North Pacific Council as a result of fishery cooperatives in the directed pollock fishery...", they should apply the sideboards to all eligible catcher vessels to afford protection to the non-AFA eligible vessels. A discussion of this issue in chapter 7 concludes this decision will likely have the greatest impact on catcher vessels that had smaller pollock catches and were more diversified into other fisheries. To mitigate some of the impacts on these vessels the Council provided an exemption to the Pacific cod sideboard cap for catcher vessels <125' LOA that had less than 1,700 mt. of annual pollock history and made at least 30 Pacific cod landings in the BSAI from 1995-97. However, under NMFS' proposed implementation plan, vessels which 'opt out' of the BSAI pollock fishery entirely (i.e., do not apply for an AFA permit) would not be subject to the sideboards. Sideboard exemptions will be discussed in greater detail later in this section and in the Regulatory Flexibility Act section of the document.

Sideboard caps shall be applied at the AFA catcher vessel sector level (inshore delivery vessels, mothership delivery vessels, and catcher vessels that deliver to catcher/processors) in 2000. However, NMFS shall publish the proportion of the cap represented by the aggregate catch history of the vessels in each cooperative, and facilitate the formation of an inter-cooperative agreement to monitor the subdivision of the caps at the cooperative level. NMFS shall also require each cooperative agreement to contain provisions that would limit its participants to their collective 1995-97 harvest in other fisheries.

Members of industry realized that NMFS is not in a position to monitor sideboard caps at the cooperative level in the year 2000, but requested that information on the cooperative level sideboards be published so they could monitor and enforce caps at that level themselves. The inter-cooperative agreement may enable the inshore cooperatives to better rationalize their participation in harvesting sideboard species for which they will have directed fisheries, such as Pacific cod.

Sideboard caps will apply throughout the year, except for two specific exemptions. The first exemption lifts the Pacific cod sideboard cap for vessels participating in the mothership sector on March 1 of each year. The second exemption applies to catcher vessels less than 125' LOA with less than 1,700 mt. of annual average landed pollock catch history and at least 30 Pacific cod landings from 1995-97. These vessels shall be exempt from the catcher vessel trawl Pacific cod sideboard cap throughout the entire year in the BSAI. Catch history of vessels that are exempt from the sideboards will not be included when calculating the overall sideboard caps, and their catch will not accrue against the cap when determining when the cap.

Tables 11.3 through 11.5b represent estimates of the catcher vessel sideboards in terms of historic landed catch from 1995-97, the percentage of landed catch relative to TAC, an estimate of future sideboards amounts based on the 1999 ITACs, and an estimate of the ex-vessel value of those amounts, respectively. These tables do not include catch of Pacific cod by the vessels exempted from the Pacific cod cap. So, the entire Pacific cod catch history of vessels landing less than 1,700 mt. pollock annually and the catch of catcher vessels delivering to motherships after March 1, have been excluded.

Ex-vessel value estimates reported in Table 11.5b indicate that if the catcher vessels harvested, retained, and sold all of the sideboard caps they were projected to be issued in Table 11.5a, they would generate $17.7 million per year. This estimate assumes that the catcher vessels would not have any discards and they could market all of their catch. These assumptions are unlikely to occur. Therefore, the ex-vessel value estimates likely overstate the amount of revenue that will be generated from the sideboard species.

Table 11.3: Landed Catch of Non-Exempt[1] AFA Catcher Vessels in the Bering Sea and Aleutian Islands (1995-97)

Species by TAC Grouping	All Fisheries				
	CV Inshore (90 CVs)	CV to IN/MS (11 CVs)	CV to MS (10 CVs)	CV to CP (7 CVs)	All Vessels (118 CVs)
Atka Mackerel - Central AI	15	2	-	-	17
Atka Mackerel - Eastern AI	154	10	1	6	171
Atka Mackerel - Western AI	-	-	-	-	-
Arrowtooth Flounder - BSAI	1,361	302	221	267	2,151
Other Flatfish - BSAI	4,344	481	47	283	5,155
Flathead Sole - BSAI	3,088	490	346	388	4,312
Greenland Turbot - Aleutian Islands	4	-	-	10	14
Greenland Turbot - Bering Sea	609	23	9	44	685
Other Species - BSAI	1,209	254	144	260	1,867
Pacific Cod (Fixed Gear) - BSAI	50	13	-	195	258
* P. Cod (Trawl CVs)-BSAI (97 only)	36,040	3,820	2,618	5,242	47,721
Pacific Ocean Perch - Bering Sea	537	24	16	9	586
* POP - Central AI (96-97 only)	7	-	-	-	7
* POP - Eastern AI (96-97 only)	27	-	-	3	30
*POP - Western AI (96-97 only)	-	-	-	-	-
Other Rockfish - Aleutian Islands	1	1	-	4	6
Other Rockfish - Bering Sea	30	2	1	6	39
Rock Sole - BSAI	3,174	879	387	734	5,174
Sablefish (Trawl Gear) - Aleutian Islands	64	1	-	4	69
Sablefish (Trawl Gear) - Bering Sea	1	-	-	-	1
Sharpchin/Northern Rockfish - AI	1	12	-	6	19
Squid - Bering Sea and Aleutian Islands	1,339	53	20	14	1,426
Shortraker/Rougheye Rockfish - AI	3	-	-	-	3
Other Red Rockfish - Bering Sea	57	13	4	11	85
Yellowfin Sole - BSAI	31,295	4,283	994	935	37,507

Source: Alaska Department of Fish and Game fish ticket data for inshore deliveries; National Marine Fisheries Service observer data for at-sea deliveries.

* Denotes TAC groups that do not extend throughout entire time period.

[1]: The Pacific cod catch history from vessels with less than 1,700 mt. of annual average landed pollock catch and at least 30 BSAI Pacific cod landings from 1995-97 are excluded from this table, because they are exempt from the Pacific cod sideboard cap.

Table 11.4 Percent of TAC that was Landed by Non-Exempt[1] AFA Catcher Vessels in the Bering Sea and Aleutian Islands (1995-97)

	All Fisheries				
Species by TAC Grouping	CV Inshore (90 CVs)	CV to IN/MS (11 CVs)	CV to MS (10 Cvs)	CV to CP (7 CVs)	Total Catch (118 CVs)
Atka Mackerel - Central AI	0.01%	-	-	-	0.01%
Atka Mackerel - Eastern AI	0.28%	0.02%	-	0.01%	0.31%
Atka Mackerel - Western AI	-	-	-	-	-
Arrowtooth Flounder - BSAI	3.69%	0.82%	0.60%	0.72%	5.83%
Other Flatfish - BSAI	4.70%	0.46%	0.11%	0.31%	5.58%
Flathead Sole - BSAI	3.51%	0.56%	0.39%	0.44%	4.90%
Greenland Turbot - Aleutian Islands	0.06%	-	-	0.15%	0.21%
Greenland Turbot - Bering Sea	3.60%	0.14%	0.05%	0.26%	4.05%
Other Species - BSAI	1.83%	0.39%	0.22%	0.39%	2.83%
Pacific Cod (Fixed Gear) - BSAI	0.01%	-	-	0.05%	0.06%
* P.Cod (Trawl CVs)-BSAI (97 only)	55.06%	5.84%	4.00%	8.01%	72.91%
Pacific Ocean Perch - Bering Sea	9.32%	0.42%	0.28%	0.16%	10.18%
* POP - Central AI (96-97 only)	0.11%	-	-	-	0.11%
*POP - Eastern AI (96-97 only)	0.43%	-	-	0.05%	0.48%
*POP - Western AI (96-97 only)	-	-	-	-	-
Other Rockfish - Aleutian Islands	0.05%	0.05%	-	0.21%	0.31%
Other Rockfish - Bering Sea	2.92%	0.19%	0.10%	0.58%	3.79%
Rock Sole - BSAI	1.57%	0.43%	0.19%	0.36%	2.55%
Sablefish (Trawl Gear) - AI	5.64%	0.09%	-	0.35%	6.08%
Sablefish (Trawl Gear) - Bering Sea	0.06%	-	-	-	0.06%
Sharpchin/Northern Rockfish - AI	0.01%	0.09%	-	0.05%	0.15%
Squid - BSAI	36.49%	1.44%	0.54%	0.38%	38.85%
Shortraker/Rougheye Rockfish - AI	0.11%	-	-	-	0.11%
Other Red Rockfish - Bering Sea	1.88%	0.43%	0.13%	0.36%	2.80%
Yellowfin Sole - BSAI	5.94%	0.81%	0.19%	0.18%	7.12%

Sources: Alaska Department of Fish and Game fish ticket data for inshore deliveries; National Marine Fisheries Service observer data for deliveries at-sea.

* Denotes TAC groups that do not extend throughout entire time period.

[1]: The Pacific cod catch history from vessels with less than 1,700 mt. of annual average landed pollock catch and at least 30 BSAI Pacific cod landings from 1995-97 are excluded from this table, because they are exempt from the Pacific cod sideboard cap.

Table 11.5a: Catcher Vessel Sideboard Estimates in the Bering Sea and Aleutian Islands Based on 1999 ITACs Published in the March 11, 1999 Federal Register.

	All Fisheries				
Species by TAC Grouping	CV Inshore (90 CVs)	CV to IN/MS (11 CVs)	CV to MS (10 CVs)	CV to CP (7 CVs)	All Fisheries (118 CVs)
Atka Mackerel - Central AI	2	-	-	-	2
Atka Mackerel - Eastern AI	77	5	-	2	84
Atka Mackerel - Western AI	-	-	-	-	-
Arrowtooth Flounder - BSAI	4,214	936	685	822	6,658
Other Flatfish - BSAI	6,152	602	144	406	7,304
Flathead Sole - BSAI	2,306	368	256	289	3,220
Greenland Turbot - AI	2	-	-	4	6
Greenland Turbot - Bering Sea	185	7	3	13	208
Other Species - BSAI	511	109	61	109	790
Pacific Cod (Fixed Gear) - BSAI	8	-	-	42	50
*P. Cod (Trawl CVs)-BSAI (97 only)	21,184	2,247	1,539	3,082	28,052
Pacific Ocean Perch - Bering Sea	111	5	3	2	121
* POP - Central AI (96-97 only)	4	-	-	-	4
* POP - Eastern AI (96-97 only)	13	-	-	1	14
* POP - Western AI (96-97 only)	-	-	-	-	-
Other Rockfish - Aleutian Islands	0	0	-	1	2
Other Rockfish - Bering Sea	9	1	-	2	12
Rock Sole - BSAI	1,601	439	194	367	2,601
Sablefish (Trawl Gear) - AI	32	1	-	2	35
Sablefish (Trawl Gear) - Bering Sea	0	-	-	-	0
Sharpchin/Northern Rockfish - AI	0	3	-	2	5
Squid - BSAI	611	24	9	6	651
Shortraker/Rougheye Rockfish - AI	1	-	-	-	1
Other Red Rockfish - Bering Sea	4	1	0	1	6
Yellowfin Sole - BSAI	10,501	1,432	336	318	12,587

Source: Alaska Department of Fish and Game fish ticket data for inshore deliveries; National Marine Fisheries Service observer data for deliveries at-sea.

* Denotes TAC groups that do not extend throughout entire 1995-97 time period.

Table 11.5b: Catcher Vessel Sideboard Ex-vessel Value ($ million) Estimates in the Bering Sea and Aleutian Islands Based on 1999 ITACs Published in the March 11, 1999 Federal Register, and 1997 PACFIN Ex-vessel Prices.

	All Fisheries				
Species by TAC Grouping	CV Inshore (90 CVs)	CV to IN/MS (11 CVs)	CV to MS (10 CVs)	CV to CP (7 CVs)	All Fisheries (118 CVs)
Atka Mackerel - Central AI	$0.00	-	-	-	$0.00
Atka Mackerel - Eastern AI	$0.02	$0.00	-	$0.00	$0.02
Atka Mackerel - Western AI	-	-	-	-	-
Arrowtooth Flounder - BSAI	$0.33	$0.07	$0.05	$0.07	$0.53
Other Flatfish - BSAI	$1.22	$0.12	$0.03	$0.08	$1.45
Flathead Sole - BSAI	$0.64	$0.10	$0.71	$0.08	$0.89
Greenland Turbot - AI	$0.00	-	-	$0.00	$0.00
Greenland Turbot - Bering Sea	$0.11	$0.00	$0.00	$0.01	$0.13
Other Species - BSAI	$0.01	$0.00	$0.00	$0.00	$0.02
Pacific Cod (Fixed Gear) - BSAI	$0.00	-	-	$0.01	$0.02
*P. Cod (Trawl CVs)-BSAI (97 only)	$9.81	$1.04	$0.71	$1.43	$12.99
Pacific Ocean Perch - Bering Sea	$0.02	$0.00	$0.00	$0.00	$0.02
* POP - Central AI (96-97 only)	$0.00	-	-	-	$0.00
* POP - Eastern AI (96-97 only)	$0.00	-	-	$0.00	$0.00
* POP - Western AI (96-97 only)	-	-	-	-	-
Other Rockfish - Aleutian Islands	$0.00	$0.00	-	$0.00	$0.00
Other Rockfish - Bering Sea	$0.01	$0.00	-	$0.00	$0.01
Rock Sole - BSAI	$0.52	$0.14	$0.06	$0.12	$0.84
Sablefish (Trawl Gear) - AI	$0.16	$0.01	-	$0.01	$0.18
Sablefish (Trawl Gear) - Bering Sea	-	-	-	-	-
Sharpchin/Northern Rockfish - AI	$0.00	$0.00	-	$0.00	$0.00
Squid - BSAI	$0.05	$0.00	$0.00	$0.00	$0.05
Shortraker/Rougheye Rockfish - AI	$0.00	-	-	-	$0.00
Other Red Rockfish - Bering Sea	$0.00	$0.00	$0.00	$0.00	$0.00
Yellowfin Sole - BSAI	$1.81	$0.25	$0.06	$0.05	$2.16
Total	$14.39	$1.01	$0.54	$1.77	$17.71

Source: Alaska Department of Fish and Game fish ticket data for inshore deliveries; National Marine Fisheries Service observer data for deliveries at-sea.

* Denotes TAC groups that do not extend throughout entire 1995-97 time period.

11.2.3.2 BSAI PSC Sideboard Caps

BSAI PSC sideboard caps shall be based on the ratio of landed catch in each non-pollock target fishery to the PSC cap for that target, and shall represent an aggregate cap which is not subdivided among catcher vessel sectors. Based on this formula, preliminary estimates indicate that catcher vessels bound by sideboard caps will be allowed to harvest up to 34 percent of the halibut and crab PSC species allocated to the Pacific cod fishery, 7 percent of those allocations to the yellowfin sole fishery, 4 percent of those allocations to the rock sole/other flatfish/flathead sole fisheries, and 1 percent of those allocations to the Atka mackerel/other groundfish fisheries (after pollock has been excluded). Catcher vessels that were exempted from Pacific cod sideboard caps will not be bound by PSC sideboard caps. They will only be limited by the overall trawl PSC apportionments in the Pacific cod fishery.

As with groundfish sideboards, PSC sideboards are caps, meaning that the AFA catcher vessel fleet is not guaranteed any specific amount of PSC bycatch. Instead they are limited to a fraction of the overall trawl allocation. If an overall trawl PSC cap is reached for any target fishery (or group of target fisheries), the directed fishery will close for all trawl vessels, regardless of whether the AFA vessels have attained their aggregate PSC sideboard cap.

PSC sideboard caps will be implemented only for halibut and crab species. No PSC caps will be set for herring or the salmon species, since bycatch of those species occurs predominantly in the pollock fishery. Instead, AFA catcher vessels will be monitored as part of the overall trawl fleet under the herring and salmon PSC caps.

11.2.4 Gulf of Alaska Sideboard Caps

Like the BSAI sideboard caps, the GOA caps will be based on aggregate landed groundfish catch of AFA catcher vessels between 1995-97 (1997 only for Atka Mackerel), and will be expressed as a percentage of the TAC that was available those years. These percentages will then be multiplied by the TAC set for each species, after the TACs are set in December prior to the start of the next fishing season, to determine the actual harvest amounts that will be available to AFA catcher vessels restricted by sideboard caps.

NMFS was requested to determine the bycatch needs for pollock and non-pollock fisheries and allow for directed fishing such that the total catch of those species should not exceed the sideboard caps, meaning that NMFS will first determine bycatch needs for species that have a sufficient cap to allow for a directed fishery, and the remainder of the cap would be available as a directed fishery allowance. The result of this direction is to indicate the Council's intent that the caps are not intended to be only used as directed fishing caps, but they are also to cover bycatch needs in other directed fisheries.

The sideboard caps shall apply to all AFA vessels participating in the GOA fisheries, regardless of whether the vessels joins a cooperative (unless they 'opt out' or are exempted). Sideboard caps shall be applied throughout the year except that vessels <125' with less than 1,700 mt. of annual average BSAI pollock landed catch history and 40 GOA groundfish landings from 1995-1997 shall be exempt from GOA groundfish sideboards. This exemption differs from the BSAI exemption in that it covers any directed fisheries.

Sideboard caps will be applied at the AFA-eligible catcher vessel sector level in 2000. However, NMFS shall publish the proportion of the cap represented by the aggregate catch history of the vessels in each cooperative, and encourage the formation of an inter-cooperative agreement to monitor the sub-division of the caps at the cooperative level. NMFS shall require each cooperative agreement to contain provisions that would limit its participants to their collective 1995-97 harvest in other fisheries.

11.2.4.1 Gulf of Alaska Groundfish Sideboard Caps

Groundfish sideboard caps in the GOA are based on the amount of groundfish landed by AFA eligible catcher vessels in all target fisheries and is expressed as a ratio relative to the TAC that was available those years. The pollock portion of the sideboards will be apportioned seasonally, based on the percentage of the overall pollock TAC allocated to each quarter. When a vessel is excluded from a cap through an exemption, their catch of species covered under the exemption is not included in the cap calculation, nor will its catch accrue toward the cap.

Note that the number of vessels listed in the column heading is less in the GOA than it was in the BSAI. This is due to not all of the AFA vessels being qualified under LLP in the GOA. Another consideration is that not all vessels qualify in all areas of the GOA under LLP. Recall that licenses will be issued for the Western GOA, Central GOA (including West Yakutat), and Southeast Outside areas.

The estimates of catcher vessel sideboard caps in the GOA presented in Table 11.8a (Table 11.8b reports value estimates), provide insights into which species have adequate caps to support a directed fishery. It is expected that the directed fisheries should include pollock, Pacific cod, and shallow water flatfish. Necessary amounts of Pacific Ocean Perch, various rockfish species, sablefish, and deep water flatfish may be available in some areas, but NMFS will need to make this determination prior to the start of fishing each year.

Pollock sideboard caps are to be subdivided on a seasonal basis. The season dates published in the March 11, 1999 Federal Register notice indicate for 1999 the seasonal allocations will be 30 percent in the A season (opens January 20), 20 percent in the B season (opens June 1), and 25 percent in both the C (opens September 1) and D (opens five days after the C season closes) seasons.

Table 11.6: Landed Catch of All Eligible AFA Catcher Vessels in the Gulf of Alaska (1995-97), by AFA CV Sector

Species by TAC Grouping	AFA CV Harvests				
	CV Inshore	CV to IN/MO	CV to MO	CV to CP	Total
Atka Mackerel - Central Gulf (95-96)	1	2	0	1	4
Atka Mackerel - Gulf of Alaska (1997)	78	0	0	0	78
Atka Mackerel - Western Gulf (95-96)	228	15	0	6	249
Arrowtooth Flounder - Central Gulf	994	546	0	0	1,540
Arrowtooth Flounder - Eastern Gulf	0	23		2	25
Arrowtooth Flounder - Western Gulf	69	2	1	0	72
Deep Water Flatfish - Central Gulf	628	531		0	1,159
Deep Water Flatfish - Eastern Gulf		6		14	20
Flathead Sole - Central Gulf	68	78	0	0	146
Flathead Sole - Eastern Gulf	0	1		5	6
Flathead Sole - Western Gulf	64	1	11	1	77
Northern Rockfish - Central Gulf	294	116		0	410
Northern Rockfish - Eastern Gulf	0	0	0	0	0
Northern Rockfish - Western Gulf	1				1
Other Species - Gulf of Alaska	195	54	1	13	264
Pacific Cod (Inshore) - Central Gulf	3,638	2,039	945	1	6,623
Pacific Cod (Offshore) - Central Gulf		37	314	386	737
Pacific Cod (Offshore) - Eastern Gulf	0	0		6	6
Pacific Cod (Inshore) - Western Gulf	5,059	1,380	673	333	7,445
Pacific Cod (Offshore) - Western Gulf		13	109	527	648
Pelagic Shelf Rockfish - Central Gulf	0	0	0	0	0
Pelagic Shelf Rockfish - Eastern Gulf		1		20	21
Pelagic Shelf Rockfish - Western Gulf	1	0	0	0	1
Pollock - Chirikof District	6,892	438	17	151	7,497
Pollock - Eastern Gulf	2,990	1,123		165	4,278
Pollock - Kodiak	6,355	3,202	1,128	125	10,810
Pollock - Shumagin District	43,319	2,590	447	91	46,446
Pacific Ocean Perch - Central Gulf	286	503	0	0	789
Pacific Ocean Perch - Eastern Gulf	2	1		146	149
Pacific Ocan Perch - Western Gulf	19	0	0	0	19
Rex Sole - Central Gulf	122	71		0	193
Rex Sole - Eastern Gulf	0	8		8	16
Rex Sole - Western Gulf	12	0	0	0	12
Slope Rockfish - Central Gulf	7	2		0	9
Sablefish (Trawl Gear) - Central Gulf	84	84		0	168

Table 11.6 (Continued) Species by TAC Grouping	AFA CV Harvests				
	CV Inshore	CV to IN/MO	CV to MO	CV to CP	Total
Sablefish (Trawl Gear) - Western Gulf	3	0	0	0	3
Sablefish (Trawl Gear) - Western Yakutat		0		10	10
Shallow Water Flatfish - Central Gulf	544	1,075	5	8	1,633
Shallow Water Flatfish - Eastern Gulf	0	8		30	38
Shallow Water Flatfish - Western Gulf	303	11	5	33	352
Shortraker / Rougheye - Central Gulf	43	6		0	49
Shortraker / Rougheye - Eastern Gulf	4	2		10	16
Shortraker / Rougheye - Western Gulf	0	0	0	0	0
Thornyhead - Gulf of Alaska	20	24	0	13	57

Source: Alaska Department of Fish and Game fish ticket data; National Marine Fisheries Service observer data

***** Denotes TAC groups that do not extend throughout entire time period.

Note: Excludes catch of GOA exempt vessels

Table 11.7: Percent of TAC Harvested by All Eligible AFA Catcher Vessels in the Gulf of Alaska (1995-97), by AFA Catcher Vessel Sector

Species by TAC Grouping	AFA CV Harvests				
	CV Inshore	CV to IN/MO	CV to MO	CV to CP	All Fisheries
Atka Mackerel - Central Gulf (95-96)	0.05%	0.10%	-	0.03%	0.18%
Atka Mackerel - Gulf of Alaska (1997)	7.80%	-	-	-	7.80%
Atka Mackerel - Western Gulf (95-96)	4.94%	0.32%	-	0.13%	5.39%
Arrowtooth Flounder - Central Gulf	1.33%	0.73%	-	-	2.06%
Arrowtooth Flounder - Eastern Gulf	-	0.15%	-	0.01%	0.16%
Arrowtooth Flounder - Western Gulf	0.46%	0.01%	-	-	0.47%
Deep Water Flatfish - Central Gulf	3.36%	2.84%	-	-	6.20%
Deep Water Flatfish - Eastern Gulf	-	0.06%	-	0.15%	0.21%
Flathead Sole - Central Gulf	0.45%	0.52%	-	-	0.97%
Flathead Sole - Eastern Gulf	-	0.01%	-	0.07%	0.08%
Flathead Sole - Western Gulf	1.07%	0.02%	0.18%	0.02%	1.29%
Northern Rockfish - Central Gulf	2.20%	0.87%	-	-	3.07%
Northern Rockfish - Eastern Gulf	-	-	-	-	-
Northern Rockfish - Western Gulf	0.05%	-	-	-	0.05%
Other Species - Gulf of Alaska	0.50%	0.14%	-	0.03%	0.67%
Pacific Cod (Inshore) - Central Gulf	2.98%	1.67%	0.77%	-	5.42%
Pacific Cod (Offshore) - Central Gulf	-	0.36%	3.07%	3.78%	7.21%
Pacific Cod (Offshore) - Eastern Gulf	-	-	-	0.78%	0.78%
Pacific Cod (Inshore) - Western Gulf	8.90%	2.43%	1.18%	0.59%	13.10%
Pacific Cod (Offshore) - Western Gulf	-	0.20%	1.72%	8.34%	10.26%
Pelagic Shelf Rockfish - Central Gulf	-	-	-	-	-
Pelagic Shelf Rockfish - Eastern Gulf	-	0.03%	-	0.63%	0.66%
Pelagic Shelf Rockfish - Western Gulf	0.04%	-	-	-	0.04%
Pollock - Chirikof District	11.60%	0.74%	0.03%	0.25%	12.62%
Pollock - Eastern Gulf	25.45%	9.56%	-	1.41%	36.42%
Pollock - Kodiak	11.66%	5.88%	2.07%	0.23%	19.84%
Pollock - Shumagin District	58.18%	3.48%	0.60%	0.12%	62.38%
Pacific Ocean Perch - Central Gulf	2.51%	4.41%	-	-	6.92%
Pacific Ocean Perch - Eastern Gulf	0.03%	0.02%	-	2.20%	2.25%
Pacific Ocan Perch - Western Gulf	0.51%	-	-	-	0.51%
Rex Sole - Central Gulf	0.74%	0.43%	-	-	1.17%
Rex Sole - Eastern Gulf	-	0.13%	-	0.13%	0.26%
Rex Sole - Western Gulf	0.43%	-	-	-	0.43%
Slope Rockfish - Central Gulf	0.32%	0.09%	-	-	0.41%
Sablefish (Trawl Gear) - Central Gulf	1.92%	1.92%	-	-	3.84%
Sablefish (Trawl Gear) - Western Gulf	0.23%	-	-	-	0.23%
Sablefish (Trawl Gear) - Western Yakutat	-	-	-	2.36%	2.36%
Shallow Water Flatfish - Central Gulf	1.40%	2.77%	0.01%	0.02%	4.20%
Shallow Water Flatfish - Eastern Gulf	-	0.23%	-	0.83%	1.06%

Table 11.7 (Continued)	AFA CV Harvests				
Species by TAC Grouping	CV Inshore	CV to IN/MO	CV to MO	CV to CP	All Fisheries
Shallow Water Flatfish - Western Gulf	2.24%	0.08%	0.04%	0.24%	2.60%
Shortraker / Rougheye - Central Gulf	1.27%	0.18%	-	-	1.45%
Shortraker / Rougheye - Eastern Gulf	0.26%	0.13%	-	0.66%	1.05%
Shortraker / Rougheye - Western Gulf	-	-	-	-	-
Thornyhead - Gulf of Alaska	0.41%	0.50%	-	0.27%	1.18%

Source: Alaska Department of Fish and Game fish ticket data; National Marine Fisheries Service observer data

***** Denotes TAC groups that do not extend throughout entire time period.

Note: Excludes catch of GOA exempt vessels

Table 11.8a: Estimated Gulf of Alaska Sideboards (in mt) Based on 1999 TACs

Species by TAC Grouping	AFA CV Harvests				
	CV Inshore	CV to IN/MO	CV to MO	CV to CP	All Fisheries
Atka Mackerel - Gulf of Alaska (1997)	47				47
Arrowtooth Flounder - Central Gulf	333	183			515
Arrowtooth Flounder - Eastern Gulf		8		1	8
Arrowtooth Flounder - Western Gulf	23	1			24
Deep Water Flatfish - Central Gulf	92	78			170
Deep Water Flatfish - Eastern Gulf		2		5	6
Flathead Sole - Central Gulf	23	26			49
Flathead Sole - Eastern Gulf		0		1	2
Flathead Sole - Western Gulf	21	0	4	0	26
Northern Rockfish - Central Gulf	91	36			127
Other Species - Gulf of Alaska	73	20		4	98
Pacific Cod (Inshore) - Central Gulf	1,024	574	264		1,862
Pacific Cod (Offshore) - Central Gulf		12	105	130	248
Pacific Cod (Inshore) - Western Gulf	1,633	446	217	108	2,404
Pacific Cod (Offshore) - Western Gulf		4	32	153	188
Pelagic Shelf Rockfish - Eastern Gulf		0		6	6
Pollock - Chirikof District	4,505	287	12	97	4,902
Pollock - Eastern Gulf	2,148	807		119	3,074
Pollock - Kodiak	3,559	1,795	632	70	6,055
Pollock - Shumagin District	13,451	805	139	28	14,422
Pacific Ocean Perch - Central Gulf	170	298			468
Pacific Ocean Perch - Eastern Gulf	1	1		88	90
Pacific Ocan Perch - Western Gulf	9				9
Rex Sole - Central Gulf	41	24			64
Rex Sole - Eastern Gulf		3		3	6
Rex Sole - Western Gulf	5				5
Slope Rockfish - Central Gulf	2	1			3
Sablefish (Trawl Gear) - Central Gulf	21	21			43
Sablefish (Trawl Gear) - Western Gulf	1				1
Sablefish (Trawl Gear) - W Yakutat				6	6
Shallow Water Flatfish - Central Gulf	181	359	1	3	544
Shallow Water Flatfish - Eastern Gulf		3		11	14
Shallow Water Flatfish - Western Gulf	101	4	2	11	117
Shortraker / Rougheye - Central Gulf	12	2			14
Shortraker / Rougheye - Eastern Gulf	1	1		3	5
Thornyhead - Gulf of Alaska	8	10		5	23

Source: Alaska Department of Fish and Game fish ticket data; NMFS observer data

***** Denotes TAC groups that do not extend throughout entire time period.

Note: Excludes catch of GOA exempt vessels

Table 11.8b: Value Estimtates of Catcher Vessel Sideboards ($ Million) -- Based on 1999 Gulf of Alaska TACs and 1997 PACFIN Ex-vessel Prices

Species by TAC Grouping	CV Inshore	CV to IN/MS	CV to MS	CV to CP	All Vessels
*Atka Mackerel - GOA (1997)	$0.02	-	-	-	$0.02
Arrowtooth Flounder - C. Gulf	$0.03	$0.01	-		$0.04
Arrowtooth Flounder - E. Gulf	-	$0.00	-	$0.00	$0.00
Arrowtooth Flounder - W. Gulf	$0.00	$0.00	-	-	$0.00
Deep Water Flatfish - C. Gulf	$0.03	$0.03	-	-	$0.06
Deep Water Flatfish - E. Gulf	-	$0.00	-	$0.00	$0.00
Flathead Sole - C. Gulf	$0.01	$0.01	-	-	$0.01
Flathead Sole - E. Gulf	-	$0.00	-	$0.00	$0.00
Flathead Sole - W. Gulf	$0.01	$0.00	$0.00	$0.00	$0.01
Northern Rockfish - C. Gulf	$0.03	$0.01	-	-	$0.04
Northern Rockfish - W. Gulf	$0.00	-	-	-	$0.00
Other Species - GOA	$0.01	$0.00	-	$0.00	$0.01
Pacific Cod (Inshore) - C. Gulf	$0.47	$0.27	$0.12	$0.00	$0.86
Pacific Cod (Offshore) - C. Gulf	-	$0.01	$0.05	$0.06	$0.11
Pacific Cod (Inshore) - E. Gulf	$0.01	$0.00	$0.00	$0.00	$0.01
Pacific Cod (Inshore) - W. Gulf	$0.76	$0.21	$0.10	$0.05	$1.11
Pacific Cod (Offshore) - W. Gulf	-	$0.00	$0.01	$0.07	$0.09
Pelagic Shelf Rockfish - E. Gulf	-	$0.00	-	$0.00	$0.00
Pollock - Chirikof District	$0.99	$0.06	$0.00	$0.02	$1.08
Pollock - E. Gulf	$0.47	$0.18	-	$0.03	$0.68
Pollock - Kodiak	$0.78	$0.40	$0.14	$0.02	$1.33
Pollock - Shumagin District	$2.97	$0.18	$0.03	$0.01	$3.18
Pacific Ocean Perch - C. Gulf	$0.03	$0.05	$0.00	$0.00	$0.07
Pacific Ocean Perch - E. Gulf	$0.00	$0.00	-	$0.01	$0.01
Pacific Ocan Perch - W. Gulf	$0.00	-	-	-	$0.00
Rex Sole - C. Gulf	$0.02	$0.01	-	-	$0.03
Rex Sole - E. Gulf	-	$0.00	-	$0.00	$0.00
Rex Sole - W. Gulf	$0.00	-	-	-	$0.00
Slope Rockfish - C. Gulf	$0.00	$0.00	-	-	$0.00
Sablefish (Trawl Gear) - C. Gulf	$0.08	$0.08	-	-	$0.17
Sablefish (Trawl Gear) - W. Gulf	$0.00	-	-	-	$0.00
Sablefish (Trawl Gear) - W. Yakutat	-	-	-	$0.02	$0.02
Shallow Water Flatfish - C. Gulf	$0.09	$0.17	$0.00	$0.00	$0.26
Shallow Water Flatfish - E. Gulf	-	$0.00		$0.01	$0.01
Shallow Water Flatfish - W. Gulf	$0.05	$0.00	$0.00	$0.01	$0.06
Shortraker / Rougheye - C. Gulf	$0.00	$0.00	$0.00	$0.00	$0.00
Shortraker / Rougheye - E. Gulf	$0.00	$0.00	$0.00	$0.00	$0.00
Thornyhead - GOA	$0.01	$0.01		$0.00	$0.03
Total	$6.68	$1.69	$0.46	$0.31	$9.32

Source: ADF&G fish ticket data; National Marine Fisheries Service observer data, 1997 PACFIN Price data

Note: The catch of exempt vessels was excluded.

11.2.4.2 GOA PSC Sideboards Caps

PSC sideboard caps for halibut in the GOA will be set equal to the percentage of groundfish landed, relative to TAC, aggregated by the deep [5] and shallow [6]-water PSC complexes. To calculate the halibut sideboard caps, first the overall trawl halibut allowances will be seasonally apportioned. Then the percentage of groundfish landed by the AFA fleet relative to the TAC, for the deep and shallow-water complexes seperately, will be multiplied by the seasonal apportionment of halibut to determine the tons of halibut they will be constrained by during that season.

A preliminary estimate for the deep-water complex indicates that AFA catcher vessels will be capped at 7 percent of the seasonal halibut sideboards (Table 11.9). The shallow-water cap would be set at 34 percent of the seasonal halibut apportionments, if pollock is included in the calculation. Because pollock is not an AFA species in the Gulf, including those landings in the calculation may be appropriate. Had pollock been excluded, the shallow-water halibut cap would be approximately half (16 percent) of the original estimate. Reducing the halibut cap by half would likely leave little halibut available for the directed fisheries other than pollock in the shallow-water PSC complex. According to information presented in Table 11.8b, pollock accounts for about two-thirds of the overall sideboard value, $6.27 million. The remaining species account for the other $3.05 million.

Attainment by the entire fleet of any PSC cap will close directed fishing to all trawl vessels, even if the AFA vessels have not attained their aggregate PSC cap. This is consistent with the concept that sideboards are caps and not allocations to the AFA fleet.

[5] Deep-water species complex is comprised of sablefish, all rockfish targets, deep-water flatfish, rex sole, and arrowtooth flounder.

[6] Shallow-water species complex is comprised of pollock, Pacific cod, shallow-water flatfish, flathead sole, Atka mackerel, and "other species".

Table 11.9: Estimates of halibut PSC caps for AFA vessels in the GOA by season, based on 1999 apportionments

Complex	Jan 20 - Mar 31	Apr 1 - Jul 3	Jul 4 - Sep 30	Oct 1 - Dec 31	Total
Overall Trawl Apportionment					
Deep	100	300	400	400	1,000*
Shallow	500	100	200		1,000*
Total	600	400	600	400	2,000
Estimated AFA Sideboard Caps					
Deep	7	21	28	82*	70*
Shallow	170	34	68		340*
Total	177	55	96	82	410*

* Assumes that the 400 mt of halibut in the 4 th quarter is equally divided between the deep and shallow-water complexes.
Note: The AFA vessels were capped at 7 percent of the deep-water complex trawl apportionment and 34 percent of the shallow-water complex trawl apportionment.

11.2.5 Summary of Catcher Vessel Sideboards

The sideboard caps designed by the Council should effectively limit any adverse impacts caused by cooperatives on non-AFA vessels, as mandated by the Act. This was the overarching purpose of developing sideboard restrictions for the catcher/processors and catcher vessels in the AFA fleet. In general the non-AFA vessels were concerned that allowing the AFA pollock fleet to change their harvest strategies in the BSAI pollock fishery would allow them to concentrate more effort in other fisheries. This additional effort would be to the detriment of the other vessels that had traditionally relied on those fisheries.

Using landed catch as a proxy for catch history will reduce the amount of every species available to the AFA fleets under the sideboard caps, relative to using total catch. Estimating the impacts of using retained catch versus total catch requires assumptions regarding future prices, discard rates, and harvests within the sideboard caps. Given the uncertainty associated with making these assumptions, the reliability of the estimates must be considered by the reader and should be treated as directional trends and not point estimates. However, it is very likely that using retained catch will reduce gross revenues for the AFA catcher vessels, since not all of the fish will be sold.

A summary of the changes was provided earlier in this chapter. Species discarded at the highest rates will be most impacted in terms of overall sideboard amounts. Yet many of the species with high discard rates were not taken in directed fisheries by the AFA fleet, or at least the directed fisheries were minimal. Therefore it is doubtful NMFS would have opened directed fisheries for those species even had total catch been used to determine the sideboards, since they would need to be set aside for bycatch in other directed fisheries.

Species harvested in directed fisheries generally had the lower discard rates. This makes intuitive sense. If you are trying to catch a species you are less likely to throw it back. Still there will be reductions in the amounts of species taken in directed fisheries that AFA vessels may harvest. Reductions in directed fisheries amounts of fish a particular sector can harvest may lead to reduced revenues, if prices are not affected, by allowing the

other vessels to harvest the AFA fleet's catch history that was discarded at-sea. This will likely result in a redistribution of revenue among members of the AFA and Non-AFA fleets.

It is difficult to determine if the overall benefits accruing to the AFA fleet from having pollock cooperatives will out-weigh any net revenue losses resulting from the sideboard restrictions being imposed. However, it is known that these vessels have primarily fished the pollock and Pacific cod fisheries in the past and they will continue to have access to the BSAI pollock fishery and about 73 percent of the BSAI Pacific cod catcher vessel trawl allocation. They also will be allowed to harvest about 10 percent of the GOA Pacific cod (slightly higher or lower depending on the area) and 13 to 62 percent of the GOA pollock (again depending on the area). Those catcher vessels that had limited amounts of catch history in pollock were exempted from Pacific cod sideboard restrictions in the BSAI, and Pacific cod, pollock, and other GOA directed fisheries they participated. AFA vessels that historically fished opilio crab (fished at least four years from 1988-97) were also exempted from that cap. They were allowed to continue fishing for opilio with no catch limit restrictions.

Calculating "net benefits to the Nation" resulting from these decisions is not possible. Net benefit calculations require data that are currently not available to the analysts. Additional information on costs and price/quantity relationships would be needed. However, it is reasonable to assume that the positive benefits resulting from the formation of cooperatives in the pollock fishery, where buyers and sellers share market power, and may exploit economic efficiencies not available in an "open-access" management setting, are greater than any losses generated by sideboard restrictions. It is also true that gains/losses in this case are primarily distributional in nature, and that "net" effects of sideboards will likely tend to be close to neutral overall (all other factors being equal).

The Council decision to exempt certain vessels from the sideboards is not expected to result in the AFA vessels (both exempt and non-exempt) exceeding the overall catch historically accounted for by these vessels. The requirements for the exemptions result in a small number of vessels being exempt, and these vessels were traditionally involved to a greater extent in non-pollock fisheries than in the pollock fisheries. Finally, the Council's recommended exemptions are also responding to Section 213 of the Act, which allows management actions to mitigate adverse impacts on owners of fewer than three vessels. Without such exemptions these vessels would likely be adversely impacted to the extent they may not be able to harvest their historical share of the non-pollock species.

11.3 Non-Sideboard Decisions

The Council also selected preferred alternatives for several non-sideboard issues. Included in this suite of decisions are compensation measures for determining pollock catch history for inshore catcher vessels, conformance measures with Inshore-Offshore 3 amendment package, and clarification of the single geographic location definition for inshore processors.

11.3.1 Compensation for Inshore Catcher Vessels in the Pollock Fishery

Two compensation measures were approved by the Council. The first would allow catcher vessels that qualify for the inshore sector to count BSAI pollock catch delivered to catcher/processors, as if it were delivered inshore, when determining the percentage of the inshore quota they are allowed to take into a cooperative. To qualify to bring this catch history inshore, the vessel must have delivered at least 499 mt. of pollock to catcher/processors from 1995-97. If that criteria is met, the catcher vessel can add that pollock catch to the pollock delivered inshore that year. Preliminary estimates indicate that the catcher vessels that do not meet this

landing requirement, i.e. receiving no compensation, would have their pollock allocation reduced by about five percent.

The second compensation measure allows inshore catcher vessels to use there best two years of pollock catch history, from 1995-97, to determine their percentage of the inshore quota. The best two years would be determined after any compensation from deliveries made to catcher/processors in a year was added into that years inshore delivery total. Summing a catcher vessel's best two years generates the numerator for determining a vessel's percentage of the inshore quota. The denominator is calculated by summing the best two years of catch history for all inshore catcher vessels, whether they are AFA qualified or not. Once this calculation is done, any portion of the inshore catch history not assigned to the AFA vessels would go into the "open access" portion of the inshore pollock fishery. Preliminary estimates indicate that about 0.4 percent of the inshore allocation would default to the "open access" pool using this method. The Figure 10.1 in chapter 10 shows the distribution of "winners" and "losers" by using the best two of three year formula.

11.3.2 AFA and Inshore-Offshore 3 Conformance Measures

Several amendments were passed to make the AFA and Inshore-Offshore 3 programs consistent. In general, these amendments are minor decisions in that they are required or they are technical in nature.

The BSAI pollock allocation percentages where changed to those mandated by the Act. AFA defined those allocations to be 50 percent to the inshore sector, 40 percent to the catcher/processor sector, and 10 percent to the mothership sector, after accounting for bycatch needs in other directed fisheries and the 10 percent CDQ allocation. Other activities were primarily to achieve consistency in definitions contained in the AFA and those in the Magnuson-Stevens Act or existing regulation.

The original Inshore-Offshore directed fishing definitions applied equally in both the BSAI and the GOA. The AFA definitions, however, specifically apply only to Inshore-Offshore fish harvested in the BSAI. Therefore the Council voted to apply the same directed fishing harvest definitions to pollock in the BSAI and GOA, as was used in the original Inshore-Offshore program.. The substantive effect of this alternative would apply only to pollock harvests; not Pacific cod, because Pacific cod is an Inshore-Offshore species only in the GOA. Pollock is an Inshore-Offshore species in both areas. Hence, the Inshore-Offshore definitions would apply to pollock regardless of from which area it was harvested.

The "shoreside processor" definition should apply to the processing of "groundfish," as that term is defined in the Magnuson-Stevens Act, and groundfish implementing regulations. This decision should resolve a technical inconsistency between the I-O definitions used by the AFA for the BSAI and those used by the Federal groundfish regulations for the GOA. This decision also would facilitate single I-O definitions that would be consistent in both areas.

The AFA definition of "shoreside processor" is slightly different from the one used in the Federal groundfish regulations. This results in different meanings of the term being applied in the BSAI and in the GOA. The differences are that the AFA definition refers to "fish" while existing groundfish regulations refer to "groundfish" in two places. The Magnuson-Stevens Fishery Conservation and Management Act (at section 3) defines "fish" as including all forms of marine animal and plant life other than marine mammals and birds. "Groundfish," on the other hand is defined in the regulations as including only those fish for which harvest limits are annually specified pursuant to 50 CFR 679.20(a). Hence, a processor that processes only salmon and crab harvested in the BSAI, for example, would be a "shoreside processor" under the AFA but not under the regulations at 50 CFR part 679. The effect of the Council choosing their preferred alternative should be

to prevent the provisions of the AFA from applying to salmon and crab harvested in the BSAI, for example. The AFA section 208(f) provisions would be unaffected because pollock is both a "fish" under the Magnuson-Stevens Act and a "groundfish" under the Federal regulations. Consistent application of the term "shoreside processor" should enhance consistent application of the Inshore-Offshore provisions.

11.3.2.1 Single Geographic Location

The Council also voted to restrict inshore floating processors to operating in a single geographic location in State waters of the BSAI during a fishing year in which they process pollock from the directed BSAI pollock fishery. This is consistent with historic Inshore-Offshore requirements that limited inshore floating processors to a single geographic location each year in the BSAI. They will be allowed to select a new location at the start of the next fishing year, but they will be required to remain at that location for the entire year. This regulation will prevent the two AFA floating processors from gaining an economic advantage over shorebased processors that were restricted to process pollock at the same plants that they used to process pollock during 1996-97.

The Council defined "shoreside processor", for purposes of implementing the AFA, to mean the physical plant of a shoreside processor, and limit a shoreside processor that qualifies under AFA section 208(f) to receive pollock harvested in the BSAI only at the same physical location at which that shoreside processor's plant processed pollock from the directed fishery during the qualifying years of 1996 and 1997. This will prevent shoreside processors from moving pollock processing activities to plants that did not process pollock in 1996-97.

Lastly, the Council approved extending the sunset date of the current pollock and Pacific cod allocations in the GOA FMP past the current sunset of December 31, 2001 to December 31, 2004. This latter date conforms with the sunset date for Bering Sea/Aleutian Islands pollock allocations mandated by the American Fisheries Act of 1998 (Appendix V). Inshore/Offshore (I/O) allocations of the BSAI and GOA pollock TAC and GOA Pacific cod TAC were originally established under Amendments 18/23 (I/O1) to the BSAI and GOA FMPs, respectively, for 1993-95. The allocations were extended by the Council in Amendments 38/40 (I/O2) to the respective FMPs for 1996-98. In June 1998, the Council recommended another extension of the GOA allocations under Amendment 51 (I/O3). All three amendment packages contained "sunset" provisions, requiring the Council to reexamine the allocations in three years, or see them expire. The Council has linked the sunset dates for BSAI and GOA inshore/offshore allocations since 1992 under all three Inshore/Offshore amendments (GOA Amendments 23, 40, and 51).

The EA/RIR/IRFAs for GOA Amendments 23, 40, and 51 are included here by reference. The Council's preferred alternative to extend the GOA inshore/offshore allocations through December 2004 is within the scope of the EA/RIR for Amendments 51/51. This action is also analyzed in the Public Review Draft of the EA/RIR/IRFA for Amendments 62/62 (NPFMC 1999) (now withdrawn). Upon advice by NMFS, the Council's preferred action for extending the GOA FMP sunset date for pollock and cod allocations is incorporated into this EA/RIR/IRFA because of the interrelatedness of these issues.

Current and potential preemption of resources by one industry sector over another was a focal issue for the Council with regard to setting the original inshore and offshore allocations of pollock and Pacific cod in the GOA and pollock in the BSAI. Though not necessarily a problem at that time in the BSAI, it was apparent that the capacity of the offshore catcher/processor fleet posed a real preemption threat to the inshore processing industry, which relied heavily on the pollock resource. During a series of meetings beginning in 1989, the Council and industry developed analyses of various alternative solutions to the preemption problem and set allocations of pollock and Pacific cod in the GOA and pollock in the BSAI in three separate inshore/offshore

amendment packages described above. The inshore-offshore allocation issue became an integral part of the overall effort towards addressing overcapitalization in North Pacific groundfish fisheries beginning in 1992.

Two other management actions (BSAI pollock allocations and vessel replacement restrictions) in the now withdrawn draft EA/RIR/IRFA for Amendment 62/62 have also been incorporated into the current EA/RIR/IRFA for Amendment 61/61 (Amendment 62/62 is renamed and included in Appendix V) and are addressed in the rulemaking associated with this amendment package. The Council approved changing the current inshore/offshore directed pollock allocations in the Bering Sea/Aleutian Islands FMP to conform with those allocations mandated by the AFA. At the same meeting, upon advice by NMFS that the proposed Council action for vessel replacement restrictions may result in a conflict between License Limitation Program and American Fisheries Act requirements, the Council took no action on changing the FMP language on this issue. NMFS is addressing vessel replacement requirements to conform with the AFA in the rulemaking associated with this amendment package.

11.4 Other AFA Requirements

To accurately monitor the removals of pollock and non-pollock species by members of cooperatives, NMFS will be implementing the scale and observer requirements mandated for catcher/processors by the AFA. These requirements will be implemented via regulation based on direction from Congress, since the Council took no formal action. Two observers will be required to be onboard a catcher/processor at all times while groundfish is being harvested, processed, or received from another vessel in any fishery under the authority of the Council. CDQ trained observers will likely be required to work aboard AFA catcher/processors. Currently it is unknown if adequate numbers of observers with this specialized training are available. NMFS certified scales were required for weighing fish onboard AFA catcher/processors that harvest CDQ pollock beginning on January 1, 1999. The remaining AFA catcher processors will be required to use NMFS certified scales starting on January 1, 2000.

NMFS also intends to implement the inshore pollock cooperatives for the year 2000 according to the structure prescribed in the AFA, which ties harvest vessels to deliver to specific processing plants. This issue is still being reviewed by the Council. Further discussion of pollock cooperative structure alternatives is contained in Chapter 12, and in Appendix IV.

Another issue for which a Council decision is pending is that of processor sideboards. For year 2000, NMFS intends to implement crab processing sideboards as directed by the AFA. Chapter 8 contains a detailed description of that mandate, as well as alternatives for crab and groundfish processing sideboards, which may be approved by the Council at a latter date.

The Council also provided direction on the contents of cooperative agreements and when they are to be submitted. The direction given by the Council is as follows:

1) Cooperative agreements may be one to six years in duration, but must be review annually by the Council if they are more than one year in duration. The Council's intent was that this was considered to be a post- season performance review.

2) Cooperative agreements, regardless of duration, must be submitted to the Council by December 1, of the year prior to the start of fishing.

3) Prohibit cooperative agreements from requiring cooperative vessels to deliver species other than BSAI pollock to their AFA processor.

4) Cooperative agreements shall require the disclosure of catch and bycatch statistics.

11.5 Final Motion as Passed by the Council (including actions thru December 1999)

Previous sections described the Council's Preferred alternatives. The actual motion as passed is included here for reference.

Council Actions on American Fisheries Act Issues

General : (1) NMFS will manage all fisheries such that sideboards and PSC caps are not exceeded.
(2) all sideboard calculations will be based on best estimates of landed catch.

Catcher Processor Sideboards

Groundfish:

1. Non-pollock groundfish caps (other than Atka mackerel in the central and western Aleutians) for listed vessels will be established on the basis of the percent of landed groundfish catch relative to TAC (of the original 29 vessels) in the pollock and non-pollock fisheries in 1995, 96, and 97 (for Pacific cod, 1997 only; for POP in the Aleutians, 1996 and 1997).
2. NMFS will determine the bycatch needs for pollock and non-pollock fisheries and allow for directed fishing for non-pollock target species such that the total catch of those species should not exceed the caps.

PSC Caps:

1. Total PSC cap for listed vessels will be established on the basis of percentage of PSC removals in the non-pollock groundfish fisheries in 1995, 96, and 97.
2. NMFS will allow for directed fishing of non-pollock species such that the total PSC removals do not exceed the PSC cap.
3. The listed vessels' PSC caps will not be apportioned and will be managed under open access season apportionment closures.

Catcher processor sideboards for both groundfish and PSC caps are a package and disapproval of any component would be disapproval of the whole package and returned to the Council for further action.

Catcher Vessel Sideboards

BSAI Groundfish Sideboards

1. Shall be based on vessel catch between 1995-97. (1997 for P. cod)
2. Shall be based on non-pollock catch in pollock and non-pollock targets, as a ratio of the AFA vessels' catch to TAC.

3. NMFS will determine the bycatch needs for pollock and non-pollock fisheries and allow for directed fishing for non-pollock target species such that the total catch of those species should not exceed the caps.
4. Shall apply to all AFA eligible vessels regardless of participation in a co-op.
5. Shall apply at the AFA CV sector level in 2000. However, NMFS shall publish the proportion of the cap represented by the aggregate catch history of the vessels in each co-op, and facilitate the formation of an interco-op agreement to monitor the subdivision of the caps at the co-op level. NMFS shall require each co-op agreement to contain provisions that would limit its participants to their collective 1995-97 harvest in other fisheries.
6. Shall be applied throughout the year, except:
    a. Mothership sector qualified AFA vessels' (21 vessels) CV trawl P. cod sideboards shall be lifted March 1;
    b. Vessels with less than 1700 mt of annual average landed BSAI pollock catch history and with at least 30 BSAI P. cod landings from 1995-1997, shall be exempt from the catcher vessel trawl P. cod sideboard cap.

BSAI PSC Sideboard Caps

1. Shall be based on the ratio of catch in each non-pollock target to the PSC cap for that target, and shall represent an aggregate cap (as with the AFA CP sector).
2. Attainment by the entire fleet of any PSC cap in any target fishery will close directed fishing to all trawl vessels, even if the AFA vessels have not attained their aggregate PSC cap.
3. PSC species limited to crab and halibut.

GOA Groundfish Sideboards

1. Shall be based on vessel landed groundfish catch between 1995-97.
2. Shall be based on non-pollock landed groundfish catch in non-pollock targets as a ratio of the AFA vessels' catch to TAC.
3. Shall be based on the landed pollock catch in the pollock target as a ratio of the AFA vessels' catch to TAC, and shall be apportioned seasonally.
4. NMFS will determine the bycatch needs for pollock and non-pollock fisheries and allow for directed fishing for non-pollock target species such that the total catch of those species should not exceed the caps.
5. Shall apply to all AFA vessels.
6. Shall apply at the AFA-eligible catcher vessel sector level in 2000. However, NMFS shall publish the proportion of the cap represented by the aggregate catch history of the vessels in each co-op, and encourage the formation of an inter-co-op agreement to monitor the sub-division of the caps at the co-op level. NMFS shall require each co-op agreement to contain provisions that would limit its participants to their collective 1995-97 harvest in other fisheries.
7. Shall be applied throughout the year except vessels with less than 1700 mt of annual average BSAI pollock landed catch history and with at least 40 GOA groundfish landings from 1995-1997, shall be exempt from GOA groundfish sideboards.

GOA PSC Sideboards Caps

1. Shall be based on the ratio of catch in each non-pollock target to the PSC cap for that target, and shall represent an aggregate cap, sub-divided into deep and shallow water flats.
2. Attainment by the entire fleet of any PSC cap in any target fishery will close directed fishing to all trawl vessels, even if the AFA vessels have not attained their aggregate PSC cap.
3. Shall be apportioned seasonally.

Scallop Sideboards

1. Participation in a co-op is defined as any use of a vessel's catch history by a co-op, whether by direct harvest, lease, sale, or stacking of quota.
2. Measures that would restrict pollock co-op vessels to their aggregate traditional harvest in the scallop fishery in 1997 based on a percentage of the upper end of the state-wide guideline harvest. level. The cap would be this percentage applied to the upper end of the state-wide guideline harvest level established each year.

Crab Sideboards

A. Crab Sideboards shall apply to all AFA vessels.

B. Bristol Bay Red King Crab (BBRKC)

1. These AFA vessels that hold a BBRKC endorsement shall be capped at their 5-year (91-97, excluding 94-95) weighted average share. These vessels shall be managed in the aggregate.
2. This share of future catch shall apply to the pre-season BBRKC GHL.

C. Opilio — AFA LLP Alternative 9 Tanner crab endorsed vessels may participate in the opilio fishery if they harvested opilio in more than 3 of 10 years (88-97).

D. Bairdi

1. AFA qualified vessels that receive an LLP endorsement are excluded from participating in the directed bairdi fishery, except as follows: If and when the bairdi rebuilding goal is reached, the only AFA vessels allowed to participate would be those with catch history in 1995 or 96. These vessels would be capped at their aggregate historic catch for 1995-96.

2. If there is a BBRKC fishery where bairdi bycatch is allowed, the AFA Tanner crab endorsed vessels may retain bycatch bairdi.

E. AFA LLP Alternative 9 vessels which hold a LLP endorsement for either the St. Matthews or Pribilof king crab, and had a landing in that fishery in 1995, 96 or 97, may participate in that fishery. For Adak red king crab and brown crab fisheries a qualified vessel which had a landing in the last two years the fishery was open may participate in those fisheries.

F. Prohibit the sale, lease, transfer or stacking of crab LLP licenses or endorsements by AFA-eligible catcher vessels.

Non-Sideboard decisions

Compensation in Shoreside Sector Co-ops

1. Provide compensation to vessels with offshore history greater than 499 tons (as per Table 10.5).
2. Utilize the best 2 of 3 years to determine the share of the inshore pollock allocation each vessel brings to a co-op.

AFA Conformance Measures (Amendments 62/62)

Action 1, Alternative 2 Change the current inshore/offshore directed pollock allocations in the BSAI FMP to conform with those allocations mandated by the American Fisheries Act of 1998.

Action 2, Alternative 2 Extend the sunset date of the current pollock and Pacific cod allocations in the GOA FMP to conform with the date mandated for the Bering Sea/Aleutian Islands area in the American Fisheries Act of 1998.

Action 3, Alternative 1 No action. Do not change vessel replacement restrictions in the BSAI FMP.

Additionally:

1. Conforming the definitions of directed pollock harvest in the GOA and BSAI so that they are the same.
2. Substituting the term "groundfish" for "fish" in the AFA definition of "shoreside processor."
3. Applying the inshore/offshore restrictions only to directed fishing for pollock in the BSAI and GOA, and directed fishing for P. cod in the GOA. However, for the purpose of GOA catch accounting, all processors will be categorized "inshore" or "offshore."

Clarify that "shoreside processor" for purposes of Section 208(f) of the AFA means only the physical facility or vessel which processed pollock in the qualifying years 1996 and 1997, and not the entire corporate entity which owns or controls that facility or vessel.

Single Geographic Location

Restrict floating inshore processors to operating in a single geographic location in state waters of the BSAI during a fishiing year in which they process pollock from the directed BSAI pollock fishery (i.e., can change location from year to year, but not in-season).

AFA Processor Sideboards for Crab

1. Adopt a single aggregate processing cap that would apply to all processing facilities owned by inshore or mothership sector AFA entities if they receive pollock from a cooperative.

   A. NMFS will determine which processing facilities are owned by inshore or mothership AFA entities using the "limited 10% rule"
   B. Owners of inshore or mothership AFA pollock facilities that process crab under the Council's jurisdiction would be required to identify to NMFS as part of their processing permit requirements any processing facilities in which the owner has 10% or more interest using the limited 10% rule.

2. A processing facility is any plant or US documented vessel that processes crab under the jurisdiction of the North Pacific Fishery Management Council.

3. Only the limited 10% rule will be used in determining AFA entities for purposes of the historic processing cap.

4. AFA catcher processors would not be subject to additional processing sideboards.

5. The historic processing cap would be determined annually based on the average of the 1995-1997 processing history of US documented processing vessels and processing plants owned by inshore and mothership AFA entities at the start of the fishing year.

   A. If an inshore or mothership AFA entity sells a crab processing facility to a non-AFA entity, or if a processing vessel is no longer US documented, the 1995-1997 average processing history of that plant or vessel is removed from the historic processing cap. Likewise, if an inshore or mothership AFA entity buys a non-AFA processing plant or US documented vessel, then the 1995-1997 average processing history of that plant or vessel is added to the historic processing cap.
   B. The historic processing cap would be determined based on the percentage of the catch processed by inshore or mothership AFA entities.
   C. There would be no cap for undeveloped species or species without a current GHL.
   D. The cap would apply year around.

AFA Processor Sideboards for Groundfish

Action by the Council on groundfish processing sideboards has been deferred to the April 2000 meeting, where they will also decide on **BSAI pollock processing excessive share caps**.

Cooperative Agreements and Council Review

1. Cooperative agreements may be one to six years in duration, but must be review annually by the Council if they are more than one year in duration. The Council's intent was that this was considered to be a post- season performance review.

2. Cooperative agreements, regardless of duration, must be submitted to the Council by December 1, of the year prior to the start of fishing.

3. Prohibit cooperative agreements from requiring cooperative vessels to deliver species other than BSAI pollock to their AFA processor.

4. Cooperative agreements shall require the disclosure of catch and bycatch statistics.

12.0 CONSISTENCY WITH OTHER APPLICABLE LAW

12.1 Regulatory Impact Review - Summary of Analysis in Chapters 4 through 11.

The National Marine Fisheries Service (NMFS) requires the preparation of a Regulatory Impact Review (RIR) for all regulatory actions that either implement a new FMP or significantly alter an existing plan or regulations. The RIR is intended to provide a review of the changes in net and distributional benefits to society associated with proposed regulatory action, as well as a review of the problems and policy objectives prompting the action. The purpose is to ensure that the regulatory agency considers all available (reasonable) alternatives so that public welfare can be enhanced in the most efficient and cost-effective way. The RIR addresses many of the items in the regulatory philosophy and principle of Executive Order 12866. E.O. 12866 requires that the Office of Management and Budget (OMB) review proposed regulatory programs that are considered to be significant. A 'significant' regulatory action is one that is likely to:

1. Have an annual effect on the economy of $100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.

2. Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency.

3. Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof, or

4. Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

A statement of the problem and need for action relative to the proposed actions is contained in Chapter 1, which describes the American Fisheries Act and its associated mandates. The objectives of the proposed actions are to implement the provisions of the AFA related to the BSAI pollock fisheries, while protecting other fishing fleets that are not AFA members in the other groundfish, scallop, and crab fisheries under the Council's jurisdiction. The affected fisheries are described in Chapter 2 and the description of the fleet, and impacts of the proposed alternatives were detailed in Chapters 4 through 11. Chapter 11 is a description of the Council's preferred alternatives.

12.1.1 Qualitative Summary of Impacts

Estimating the magnitude of change in net National benefits was not attempted in this amendment package, because data necessary to make that calculation were not available. Cost information, including fixed and variable operating cost statistics, is a crucial element of an effective net benefit analysis. Cost information for the BSAI and GOA groundfish and crab harvesting and processing sectors are currently not available to the analysts. Therefore, it will not be possible to complete a quantitative cost/benefit analysis of the various AFA sideboard alternatives, nor derive comparative net benefit conclusions about the several competing alternatives.

The total economic value of the fishery may increase as a result of the provisions of the AFA which allow pollock to be harvested under cooperatives. However, in general actions proposed within this amendment package are designed to limit the catch of AFA vessels in other groundfish, scallop, and crab fisheries in order to protect the vessels that participated in those fisheries from unwarranted, costly, and undesirable effects

attributable to competitive efficiencies made possible by, for example, cooperative provisions of AFA . Overall the catch of non-pollock species by AFA vessels may be somewhat reduced by these amendments, because the groundfish sideboards are based on landed catch history and the crab sideboards are more restrictive than the current LLP program in most cases. Yet given the open access nature of these fisheries and the capacity that exists in other fleets, any harvest forgone by the AFA fleet will almost certainly be harvested by members of the non-AFA fleets. Differences among the alternatives for effecting sideboards do have the potential for distributional gains and losses; primarily these are trade-offs between the AFA and non-AFA vessels. While relative operating costs and other factors would affect the "net" results of such trade-offs, the basic intent of the sideboards is to maintain the status quo, in terms of the distribution of harvest between AFA and non-AFA vessels, and therefore inter-sectoral "net" impacts would be expected to tend towards neutral.

Sideboard restrictions imposed by the Council's proposed action will likely cause some re-distributional impacts among the fleets, but the changes in net benefits to the US economy would not be expected to change by $100 million annually. However, based upon several of the other criteria articulated in the Executive Order, it appears likely that the proposed sideboard actions could constitute a 'significant' action, as this term is defined, under E.O. 12866.

That is, while none of the proposed sideboards result in economic changes which approach the $100 million annual impact threshold (separately or in combination), several do directly affect in a material way "a sector of the economy", "productivity", and "competition" (each identified as a criterion of concern in the E.O.).

None is expected to (to the best of our knowledge) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; nor (based on the foregoing analysis contained in Chapters 4 through 11) materially alter the budgetary impacts of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof. The AFA-sideboards do, however, potentially raises novel legal and policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

After careful review, the suite of proposed AFA-sideboard actions has been determined to be significant, as this term is defined in the Executive Order.

Notwithstanding this finding (and, while it is not possible to quantitatively measure the "net benefit to the Nation" attributable to this suite of actions), the information and analysis which are available (including the qualitative assessment of costs and benefits cited above) suggest that the National welfare is enhanced (i.e., benefits exceed costs) by adoption of these actions, which include proposed actions allowing the pollock fleets to form cooperatives. This is further substantiated by adherence to the requirements and directives provided in the AFA, as recently pass by the U.S. Congress and signed by the President.

12.2 Initial Regulatory Flexibility Analysis (IRFA)

12.2.1 Introduction

As described in Chapter 1, the AFA mandated the development of sideboard measures to protect other fisheries from potential incursions which could result from the pollock allocations and fishery cooperatives in the pollock fisheries. Many of the participants in these non-AFA fisheries, as well as participants in the AFA fisheries to be regulated by the sideboard measures, are small, independently owned businesses. In certain cases the AFA was explicit with regard to the nature of those sideboards, while in other cases considerable latitude was given to the Council. While the general purpose of the sideboard measures is to maintain the status quo distribution

of harvest activities in the various fisheries, the Council developed a considerable range of alternatives to effect that intent. As described in detail in Chapters 6 and 7, the different alternatives and options will have differing impacts to the participants in the fisheries. One purpose of this IRFA is to describe the differential impacts to small entities resulting from the Council's final decisions on harvester sideboards from June 1999 (processor sideboards are the subject of the analyses in Chapter 8, but the Council has postponed a decision on processor sideboards).

In addition to sideboard measures the AFA prescribes certain measures related to the BSAI pollock fisheries, including the list of vessels eligible to participate in those fisheries. While vessel eligibility is one of the items explicitly outside the Council's purview under the AFA, there are nevertheless implementing regulations pursuant to this action which will affect certain small entities in the fisheries. These are discussed as part of this IRFA.

Finally, the AFA specifies the structure under which inshore pollock cooperatives will be formed. This structure is the subject of considerable debate and is subject to possible change by the Council. In February 1999 the Council requested development of an analysis of "the economic and policy issues associated with the formation of processor/catcher vessel (and mothership/catcher vessel) cooperatives under the AFA, including the alternatives outlined in the independent catcher vessel proposal with a preliminary report to the Council in June of 1999 and a final report in October 1999". During staff discussions it became apparent that this issue was intertwined with both implementation issues related to co-op structure and with mandatory considerations under the Regulatory Flexibility Act (RFA). A contract has been initiated with economists from the University of Washington and Oregon State University to explore these issues. That information, along with a review of legal issues associated with co-op formation, will be reviewed by the Council in late 1999 and could result in actions which change the co-op structure from that described in the AFA. This Chapter contains an initial analysis of these issues related to co-op structure, and the more detailed contract analysis is attached as Appendix IV. Barring further action by the Council, the co-ops will be implemented as prescribed by the AFA.

12.2.2 Statement of Problem

Several years following "Americanization"of the commercial Bering Sea Pollock fishery in US EEZ waters, a problem of over capitalization materialized in the form of excessive fishing capacity. This was associated with expansion of domestic fishing effort, due in part, to an open access fishery management policy. The ensuing "race for fish" fostered economic inefficiencies in both this fishing sector specifically and the nation generally in terms of optimal operational practices and resource utilization, respectively.

To address the problems and allocation conflicts in this fishery, Congress passed the American Fisheries Act in October 1998, which included specific allocations of pollock harvesting and processing by industry sectors, and limitations on the participants in these sectors, as well as the authority to form fishery cooperatives. The potential operational advantages associated with these measures could impact other, non-pollock harvesters and processors. The Act mandates the Council to enact measures to protect those harvesters and processors by placing limits (sideboards) on the activities of the AFA-eligible harvesters and processors. These sideboard measures are the focus of this amendment package.

12.2.3 Objective Statement of Proposed Action and its Legal Basis

With regard to commercial fishing vessels operating in the directed pollock fishery in the BSAI, the American Fisheries Act of 1998 establishes the legal basis for achieving the objective of reducing excessive fishing capacity and management regulatory conditions that could contribute to the creation of an environment capable

of fostering operational inefficiencies in this fishery (Division C, Title II of P.L. 105-277), including co-op formation and development of sideboard measures. Mitigation of potential adverse impacts to non-AFA fishermen and processors is mandated by the Act.

12.2.4 Description of each Action (non-mutually exclusive alternatives)

The following actions implemented under authority of the AFA attempt to meet the objectives described above.

(1) reduce harvest capacity through a vessel buyout program (AFA, Section 207),
(2) revise allocation of sector specific directed fishing allowances (AFA, Section 206),
(3) restrict legal eligibility to specific vessels and processors that may participate in the BSAI commercial pollock fishery (AFA, Section 208 - eligibles, Section 209 - ineligible vessels), and
(4) develop provisions for the establishment of fishery cooperatives (AFA, Section 210) among participants in specific harvest allocation sectors (AFA Section 206), that are eligible to operate in the BSAI commercial pollock fishery through cooperative association in the follow cooperative groupings:
    a. Offshore catcher processor cooperative,
    b. Offshore catcher processor - catcher vessel cooperative,
    c. Mothership - catcher vessel cooperative, and
    d. Shoreside processor - catcher vessel cooperatives.
(5) Establish sideboard measures which restrict the activities of AFA-eligible vessels in non-pollock fisheries.

The primary focus of this amendment package is item 5 above (sideboard restrictions on AFA-eligible entities), and to a more limited extent, item 4 (co-op structure). The full list of alternatives and options is contained in Chapter 1.

12.2.5 Reasoning for, and focus of, an IRFA

To ensure a broad consideration of impacts and alternatives, this IRFA has been prepared pursuant to 5 USC 603, without first making the threshold determination of whether or not this proposed action would have a significant economic impact on small entities. NMFS interprets the intent of the RFA to address negative economic impacts, not beneficial impacts, on small entities and thus such a focus exists in these analyses that are explicitly design to address RFA compliance.

In determining the scope, or 'universe', of the entities to be considered in an IRFA, NMFS generally includes only those entities, both large and small, that can reasonably be expected to be directly or indirectly affected by the proposed action. If the effects of the rule fall primarily on a distinct segment, or portion thereof, of the industry (e.g., user group, gear type, geographic area), that segment would be considered the universe for the purpose of this analysis.

12.2.6 Requirement to Prepare an IRFA

The RFA first enacted in 1980 was designed to place the burden on the government to review all regulations to ensure that, while accomplishing their intended purposes, they do not unduly inhibit the ability of small entities to compete. The RFA recognizes that the size of a business, unit of government, or nonprofit organization frequently has a bearing on its ability to comply with a federal regulation. Major goals of the

RFA are: (1) to increase agency awareness and understanding of the impact of their regulations on small business, (2) to require that agencies communicate and explain their findings to the public, and (3) to encourage agencies to use flexibility and to provide regulatory relief to small entities. The RFA emphasizes predicting impacts on small entities as a group distinct from other entities and on the consideration of alternatives that may minimize the impacts while still achieving the stated objective of the action.

On March 29, 1996, President Clinton signed the Small Business Regulatory Enforcement Fairness Act. Among other things, the new law amended the RFA to allow judicial review of an agency's compliance with the RFA. The 1996 amendments also updated the requirements for a final regulatory flexibility analysis, including a description of the steps an agency must take to minimize the significant economic impact on small entities. Finally, the 1996 amendments expanded the authority of the Chief Counsel for Advocacy of the Small Business Administration (SBA) to file *amicus* briefs in court proceedings involving an agency's violation of the RFA.

The central focus of the IRFA should be on the qualitative economic impacts of a regulation on small entities and on the alternatives that might minimize the impacts and still accomplish the statutory objectives. The level of detail and sophistication of the analysis should reflect the significance of the impact on small entities. Under 5 U.S.C., Section 603(b) of the RFA, each IRFA is required to address:

- A description of the reasons why action by the agency is being considered;

- A succinct statement of the objectives of, and the legal basis for, the proposed rule;

- A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply (including a profile of the industry divided into industry segments, if appropriate);

- A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;

- An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap or conflict with the proposed rule;

- A description of any significant alternatives to the proposed rule that accomplish the stated objectives of the Magnuson-Stevens Act and any other applicable statutes and that would minimize any significant economic impact of the proposed rule on small entities. Consistent with the stated objectives of applicable statutes, the analysis shall discuss significant alternatives, such as:

    1. The establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities;

    2. The clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities;

    3. The use of performance rather than design standards;

    4. An exemption from coverage of the rule, or any part thereof, for such small entities.

12.2.7 What is a Small Entity?

The RFA recognizes and defines three kinds of small entities: (1) small businesses, (2) small non-profit organizations, and (3) and small government jurisdictions.

Small businesses. Section 601(3) of the RFA defines a 'small business' as having the same meaning as 'small business concern' which is defined under Section 3 of the Small Business Act. 'Small business' or 'small business concern' includes any firm that is independently owned and operated and not dominate in its field of operation. The SBA has further defined a "small business concern" as one "organized for profit, with a place of business located in the United States, and which operates primarily within the United States or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor...A small business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the form is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture."

The SBA has established size criteria for all major industry sectors in the US including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has combined annual receipts not in excess of $ 3 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the $3 million criterion for fish harvesting operations. Finally a wholesale business servicing the fishing industry is a small businesses if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established "principles of affiliation" to determine whether a business concern is "independently owned and operated." In general, business concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern's size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 U.S.C. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities solely because of their common ownership.

Affiliation may be based on stock ownership when (1) A person is an affiliate of a concern if the person owns or controls, or has the power to control 50% or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, or (2) If two or more persons each owns, controls or has the power to control less than 50% of the voting stock of a concern, with minority

holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors or general partners controls the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as joint venturers if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

Small organizations. The RFA defines "small organizations" as any nonprofit enterprise that is independently owned and operated and is not dominant in its field.

Small governmental jurisdictions. The RFA defines small governmental jurisdictions as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of less than 50,000.

12.2.8 Description of Fleet, Fishery, & Industry Directly and Reasonably Indirectly Impacted by Proposed Action

12.2.8.1 Inshore Processors

Four of the 8 inshore processors operating in the BSAI pollock fishery are either wholly owned subsidiaries or close affiliates of Japanese multi-national corporations. Due to their affiliation with large foreign entities with more than 500 employees worldwide, none of these processors is a small entity. Of the remaining 4 inshore processors, 3 are owned by U.S. companies that employ more than 500 persons in all their affiliated operations, and therefore cannot be considered small entities. The remaining inshore processor has been identified as closely affiliated with its 5 delivering catcher-boats and the gross annual receipts of the affiliated entities, taken together (the processor and its 5 affiliated catcher-boats), exceed the $3 million criterion for fish harvesting operations. Therefore, none of the inshore processors in the BSAI pollock fishery appear to meet the RFA criteria for small entities.

12.2.8.2 Pollock Catcher Boats

The AFA identifies 120 catcher boats which are eligible to harvest BSAI pollock (7 in the offshore delivery sector, 92 in the inshore sector, 7 in the mothership sector, and 14 which are eligible in both the inshore and mothership sectors). This corresponds closely to the 119 catcher boats active in the BSAI pollock target fisheries which were identified in the inshore/offshore3 analysis. Ownership information from that analysis indicated that, of the 91 catcher boats that operated exclusively or partly in the inshore sector, the available ownership data identify 26 vessels owned, in whole or in part, by inshore processors. These 26 vessels may be considered to be affiliated with their respective inshore processor owners and cannot therefore be considered small entities because none of the inshore processors in the BSAI pollock fishery, themselves, are small entities for RFA purposes. An additional 5 catcher boats have been identified as closely affiliated with an inshore floating processor. These 5 catcher boats, taken together with their affiliated processor, exceed the $3 million criterion for fish harvesting operations and are therefore not believed to be small entities.

Furthermore, an additional 20 catcher boats have ownership affiliations with other catcher boats or catcher processors. The gross annual receipts of each of these groups of affiliated catcher boats is believed to exceed

the $3 million criterion for small entities, when all their fisheries earnings are taken as a whole. The remaining 40 catcher boats operating exclusively or partly in the inshore sector are believed to qualify as "small entities". As earlier suggested, the number of catcher vessels which will be permitted to participate in future inshore pollock target fisheries in the Bering Sea management area is smaller than the totals identified above owing to provisions of the AFA. As noted in the RIR, in the initial 1999 A-1 and A-2 pollock fisheries in the Bering Sea, it is estimated that approximately 53 catcher vessels participated in the harvest of the inshore allocation. In subsequent 1999 Bering Sea pollock openings, additional catcher vessels may choose to enter the fishery, since as many as 106 appear to be "eligible" under AFA criteria for inshore sector delivery. These numbers correspond relatively well with estimates provided to the Council by the Independent Catcher Vessel Association at the January Council meeting and summarized in Table 12.1.

Twenty eight catcher boats operated in the offshore sector exclusively, while 22 operated in both sectors for a total of 50 offshore catcher boats. (As noted, this multi-sector operational pattern is precluded in the future for the seven boats affiliated with the C/P fleet, by provisions of the AFA.) Of the combined at-sea catcher boat sector, 13 have ownership affiliations with large inshore or offshore processors and, therefore, do not meet the $3 million criterion for small entities. An additional 13 catcher boats have ownership affiliations with other vessels or operations that, taken together with their affiliated entities, are believed to exceed the $3 million gross receipts criterion for small entities. The remaining 24 catcher boats operating exclusively or partly in the offshore sector are believed to qualify as "small entities" (and are among the same 120 total vessels described earlier). The number of catcher vessels which will be permitted to participate in future Bering Sea pollock target fisheries is restricted to a slightly smaller total by provisions of the AFA.

12.2.8.3 Affected Small Entities

Establishment of inshore fishery cooperatives among predetermined groups of catcher vessels and a corresponding shoreside processor will establish distinct sets of entities, large and small, and their potential for inter-related economic affects resulting from such affiliation. An attempt to summarize these relationships and numerically identify the number of affected small entities is provide below in Table 12.1.

Table 12.1 Estimated number of entities impacted by establishing shoreside processor-catcher vessel cooperatives under AFA.

Cooperative Delivery Processor	Large Entity Coop	Large Entity's Catcher Vessels	Small Entity: Independent Catcher Vessels (Pre Co-op)	Neighboring Small Government Jurisdictions Economically Impacted Entity)	Neighboring Small Government Jurisdiction (NOT Economically Impacted)	Small Non-profit Org.
Peter Pan	1	0[b] , 2[c]	3	King Cove		-
Trident	2[d]	4[b] , 7[c]	28	Sand Point	Akutan*	-
Alyeska	1[e]	2[b] , 4[c]	1	Unalaska		-
Unisea	1	1[b] , 0[c]	12	"		-
Westward	1[e]	3[b] , 2[c]	3	"		-
Tyson	1[a]	0[b] , 6[c]	0	N/A		-
Northern Victor	1[a]	4[b] , 2[c]	1	N/A		-
TOTAL Large Entity **Small Entity**	8 **0**	14 , 23 **0 0**	**48**	0 **3**		? ?

Source: Includes information provided by the Independent Catcher Vessels Association. January, 1999.

[a] Floating processor with no direct neighboring community impact.

[b] Catcher vessels linked to corresponding shoreside processor via partial ownership.

[c] Catcher vessels majority owned by corresponding shoreside processor

[d] There are two processing facilities associated with one parent corporation (Trident) and could be interpreted as one "shoreside processor" assuming "person" as defined in the Magnuson-Stevens Act.

[e] These companies are subsidiaries of one larger corporation and therefore could be considered as one single "shoreside processor".

* CDQ community claiming no direct economic impact associated with neighboring shoreside plant .

Companies.

Approximately fifty-one (51) small entities, including forty-eight (48) independent catcher vessels delivering to shoreside processor and three (3) neighboring communities, are expected to be directly impacted by the establishment of AFA cooperatives within the inshore component of the BSAI directed pollock fishery. The significance of these impacts on small independent catcher vessel businesses will depend primarily on the contractual relationship between such vessel and their delivery processor as moderated by their collective cooperative agreement and cooperative by-laws. If conventional cooperative motives exist between processor and catcher vessel business members as to a foster mutually beneficial economic relationship, this cooperative action would not be expected to significantly impact a substantial number of these small entities. Indeed, the action would be a net gain for cooperative members and their neighboring communities. Conversely, if the processor associated with the cooperative choose to exploit its position as the sole- purchaser of pollock from cooperative co-members that operate as catcher vessels then it would be highly probable that a substantial number of small entities would be significantly impacted by this action implementing such fishery cooperatives

as authorized under AFA. This could be partially offset by the transfer allowance established under AFA Section 210(b)(6) for up to 10 percent of pollock harvested under such cooperative to be processed by another eligible shoreside processor as defined under Section 208(f) of the AFA. Until empirical data become available, likely after cooperatives have been in operation for two or more years, these questions cannot be definitively addressed.

Communities and groups .

Three neighboring small government jurisdictions (communities) that would be expected to have beneficial economic impacts associated with establishment of AFA inshore fishery cooperatives are Dutch Harbor, Sand Point, and King Cove. Impacts on these communities would be linked with benefits that would result from such AFA cooperatives by the establishment of a stable long-term supply of pollock to their neighboring shore-based processing plant. Such economic stability is expected to translate positively to these three neighboring communities (noting that the Regulatory Flexibility Act is designed to mitigate *adverse* impacts in any case). Insufficient data exists to substantiate any quantitative discussion on the impact AFA fishery cooperatives would have on small non-profit organizations that may be present in these neighboring communities. For these reasons, fishery cooperatives are not expected to create adverse economic impacts on a substantial number of small entities categorized as small government jurisdictions or small non-profit organizations.

The community of Akutan is not identified as a small community that would be impacted by this AFA fishery cooperatives. This determination is based on materials provided in 1995 to the North Pacific Fishery Management Council, NMFS, and the State of Alaska by the Aleutian Pribilof Island Community Development Association on behalf of Akutan. The Council, State of Alaska, and NMFS, agreed these materials sufficiently documented no significant impacts were accrued by the community of Akutan from the presence of the neighboring Trident Seafood processing facility. This claim of no significant economic linkage between the Trident facility and the community of Akutan directly resulted in a 1996 regulatory change that included Akutan as an eligible participant in the CDQ program.

12.2.9 Discussion of the Potential Negative Effects of AFA Inshore Cooperatives on Independent Catcher Vessel Owners

In the absence of sufficient corrective measures, potential will exist for adverse economic impacts to be incurred by independent catcher vessels participating in an AFA inshore cooperative. As currently designed under AFA, an inshore cooperative is established with only one shoreside processor operating as the primary pollock buyer. This shoreside processor may or may not be a member of the inshore co-op. The shoreside processor is an independent business concern and is not collectively owned by co-op member catcher vessels. Therefore, it is not assumed that profit-sharing would exist between the processor and catcher vessels in a given co-op. Inshore cooperatives, which require catcher vessels to deliver to a single shoreside processor, can create an economic environment that reduces price competition for pollock harvested by co-op members. The risk of this kind of biased pricing activity within a cooperative association is reduced if co-op members are successful in legally defending the clause that such an association is "operating for the mutual benefit of the members" as required under Section 1 of the June 24, 1934 Act (15 U.S.C. 521). This is important because without a competitive ex-vessel market for pollock landed by catcher vessel members, an economic incentive is created for the processor to increase its own profits at the expense of catcher vessel co-op members. Specifically, the processor could increase profits by lowering its operating cost through offering catcher vessel co-op members a price lower than the going market price otherwise determined by conditions of supply and demand in the pollock ex-vessel market. The downward shift in prices is similar to what would occur if ex-vessel market demand were reduced. Offsetting this incentive for processors to exploit their co-op catcher vessels may be

the potential need to renegotiate co-op terms annually and provisions of the Council's sideboards which allow catcher vessels to move between processor co-ops, from year-to-year, if they so desire.

Potential exist for significant negative impact on small independent catcher vessels if larger vessel choose not to fish in co-op and compete in the open-access directed pollock fishery. This would occur if the larger catcher vessel held a low catch history and the cost of co-op membership (e.g. high price of leasing sufficient pollock allocation from other co-op members) is greater than the perceived expense associated with harvesting an equivalent amount in the open access fishery. If those catcher vessel operators who choose not to participate in their designated cooperative happen to possess harvest capacities that are significantly larger than other catcher vessel that have substantial catch histories, but, for one reason or another, choose not to enter int a co-op, then in an open access setting, on an initial trip by trip basis, the larger vessels could out compete the smaller independent catcher vessels. This could further penalize the independent catcher vessel owners that choose not to join their designated AFA cooperative. Therefore, even with the option to fish in the open access fishery as an alternative to joining a co-op that is bound to a low-price processor, the open access option has significant economic risk due to their potential inability to compete with the larger catcher vessels on a trip by trip basis as a result of a difference in harvest capacities. If should also be noted that many of the largest catcher vessels in this fishery are wholly-owned by the very inshore processors which will be negotiating co-op agreements with the small independent vessel operators. This would negatively impact the competitive position of the smaller independent CV, because there would exist a lower quantity of pollock available in the open access fishery. The effect of reduced pollock harvest opportunity in the open access fishery would be a result from the existence of other catcher cooperatives having memberships of catcher vessels that retain legally defensible catch allocations created under the AFA action and thus correspondingly reduced the open access "pool" of available pollock. Thee is no *a priori* means of quantitatively predicting if this outcome will emerge, much less how significant it might be, if it does. However, it may require that the Council monitor this potentially over time, to assure that unanticipated adverse impacts on small entities do not result.

12.2.10 Potential Actions to Minimize Negative Impacts of Existing AFA Inshore Co-op Structure

In the context of an RFA analysis, a fish harvesting concern is a small entity if it has annual receipts not in excess of $3 million or it is not dominant in its field (defined in 13 CFR part 121, Standard Industrial Code categorizations). Previous sections of this chapter addressed the issue of defining a small entity specifically. An individual catcher vessel operating in the open access directed pollock fishery would typically meet this criteria. Generally, speaking, a fishery cooperative also is a small entity if it meets this same criteria. However, in the case of AFA cooperatives, both criteria would be exceeded and therefore an AFA cooperative would not be considered a small business concern (and all co-op participants *could* lose their 'small entity' status for RFA purposes).

For AFA participants, membership in a cooperative could modify their previous small entity categorization into what becomes a large entity (the co-op) due to their collective organized affiliation, as defined by the Small Business Administration. An AFA fishery cooperative, and its collective membership, is expected to have gross annual revenues in excess of $3 million and will be dominant in its field.

Therefore, once becoming a co-op member, a catcher vessel may no longer hold the "small business entity" status in the context of an Initial Regulatory Flexibility Analysis. However, the AFA allows catcher vessels to enter and exit a cooperative. As a result, the type of cooperative they leave and/or enter will impacts their economic viability. It is in this context that various types of fishery cooperatives are reviewed for their ability to minimize the negative impacts on small entities associated with this AFA action associated with inshore catcher vessels and processors (again assuming they retain their status as small entities).

12.2.10.1 Inshore Processor as Co-op Member

If the AFA inshore co-op membership is required to included not only the designated catcher vessels but the AFA identified individual inshore processor as well, then the possibility of biased pricing practices between processor and catcher vessels may still exist in the short-term but could be significantly reduced or eliminated in the long-term. It is possible that this would require such inshore cooperatives to have an exemption from US anti-trust laws similar to those established for the off-shore co-ops as articulated in Section 210(d) of the AFA. Legal clarification is required to determine the extent to which NPFMC authority would exist, if at all, to revise the AFA as granted under Section 213(c) to allow for such revision.

Under this situation, assuming its possibility, it would still remain possible for the co-op member processor to only (or primarily) take into consideration the economic interests of those co-op member catcher vessels in which it (i.e. processor) has full or partial ownership. The co-op processor member could adjust ex-vessel price and re-apportion the consolidated catch allocations among such boats in a manner that would achieve cost efficiency among their own vessels but to the potential economic detriment of the other co-op member catcher vessels. However, if the processor is a member of the CV co-op, such biased behavior practiced within the association (co-op) would be in violation of the mutual beneficial clause in the Act of June 25, 1934 authorizing the association's legal existence. For example, if not mutually agreed upon by co-op members, defining mutual benefit in the context of actual versus potential ex-vessel price would likely be a product of a time-consuming legal challenge between co-op member catcher vessels and the processor. However, in the long-term at least, potential for such internal equity violations could be reduced if the shoreside processor were a member of the catcher vessel cooperative and subject to co-op membership authority and subsequent decisions. If inshore processors are not co-op members but only contract with catcher vessel cooperatives that are required under the AFA to sell their designated catch allocation(s) to a corresponding specific processor, then the potential for biased pricing exists.

12.2.10.2 Establishment of Independent Catcher Vessel Cooperatives in the Inshore Sector

Members of the Independent Catcher Vessel Association (ICVA) operate boats in the BSAI directed pollock fishery. ICVA representatives perceive their members will incur negative economic impacts as a result of constraints imposed under the AFA. The AFA requires catcher vessels only to sell their pollock landings to the onshore processor associated with their fishery cooperative membership as defined under the AFA. ICVA has expressed concern about the negative economic impact on inshore catcher vessels that could result from such potential constraints on the competitive ex-vessel price of pollock landed and sold within the current AFA inshore cooperative design.

At its February 1999 meeting in Anchorage, the Council heard public testimony from independent catcher vessel owners recommending Council consideration of specific measures to reduce negative economic impacts of this action on their sector of small entities. Specifically the measure calls for Council action to change AFA language to allow independent catcher vessels to develop cooperatives among themselves. This modification would also eliminate the restriction on independent catcher vessel owners to sell their catch to a specific shoreside processor. The objective of such action is to allow independent catcher vessel owners the opportunity to work collectively as members of a fishery cooperative to maximize the economic returns for the individual allowable catch of pollock established under the AFA. The objective could be realized with the proposed establishment of greater flexibility among catcher vessels to land and sell their pollock to a shoreside processor offering the highest available ex-vessel market price.

The economic implications of this action on independent catcher vessels would be positive. It would also allow them to both retain the exclusive harvesting privileged associated with their co-op's collective pollock allocation as well as provide for their ability to accept the highest ex-vessel price for such pollock landings as offered by an eligible shoreside processor. Conversely, this option could result in unstable supply of pollock to shoreside processors that, during certain time periods, are unable to match ex-vessel price offers made by other shoreside processors. This could occur when various value-added products with different profit margins (e.g. surimi versus fillets) are being produced for different markets by different shoreside processor and thus enabling their offering a significant price differential to independent catcher vessels. Access to this price differential (selling to different plants at different times) would benefit independent catcher vessel but could impose direct negative economic impacts on shoreside processors and indirect negative impacts on small entities dependent on such processors. Based on SBA definition of small entities, shoreside processors are not considered likely candidates for consideration under the RFA with regard to negative impacts of this mitigating measure. However, an undetermined number of shore-based small entities would be indirectly impacted by negative economic consequences of this action. Therefore, consideration of establishing independent catcher vessel cooperatives as a measure mitigating against negative impacts of the current AFA legislation, to some degree becomes a trade-off between reducing direct affect incurred by such catcher vessels while increasing the potential for indirect affects incurred by shore-based small entities; shoreside processors notwithstanding.

Potentially significant economic and institutional efficiencies could be further achieved if inshore catcher vessel operators were allowed to establish cooperatives comprised of memberships which they choose themselves. This is in contrast to the existing inshore AFA co-op structure requiring co-op membership strictly as a function of historical landings to a given processor. Establishment of more efficient long-term cooperative relationships would exist among members if they are based on commonly shared objectives as well as on economic efficiencies of scale create by business affiliation decisions. Sales to a specific processor is a less than optimal index of commonality in operational objectives among a sub-set of inshore catcher vessels. Freedom to establish group membership through independent choice is an important design characteristic for establishing fishery cooperatives with permanence in a free-market system. The long-term viability of co-ops has traditionally proven most successful when they are naturally organized among members who share commitment and loyalty based on their inherent commonalities such as business focus, institutional structure, operational philosophy, geographic relationship, or cultural orientation. Such factors should be given due consideration when managers seek to foster the development of inshore pollock fishery cooperatives that will realize long-term benefits to both the fishery participants specifically, and to the nation in general.

The current AFA co-op structure does not allow a catcher vessel to change its cooperative affiliation from year to year and retain its harvest allocation concurrently. To change co-op membership (and ex-vessel buyer affiliation), the catcher vessel must fish in the open-access fishery for one year (AFA Section 210(b)(5)). For this open-access year, the AFA does not allow the vessel to retain its harvest privilege of pollock "quota share". It must compete for its share of pollock in the race scenario of the open-access fishery. Should the vessel owner choose to join an AFA co-op the following year and sell to the co-op's designated shoreside processor, the harvest privilege for the catcher vessel would be reauthorized. This open-access transition year requirement creates economic and resource inefficiencies associated with the catcher vessel's harvest allocation amount. It is probable that this same amount of pollock would be harvested over a shorter time period in the open-access fishery than if harvested under a co-op arrangement. As a result, open-access pollock harvests would generally yield lower recovery rates and create conditions for less than optimal market prices due to the surge in supply. Furthermore, per unit operating costs would likely be higher for the open-access operation than what could be expected under a more flexible inshore cooperative structure. Generally speaking, the transition year constraint imposed by the AFA on inshore catcher vessel owners who seek to shift their vessel's membership between

AFA co-ops, will create the potential for more, rather than less, inefficiencies in the inshore component of the BSAI directed pollock fishery.

The preceding discussion regarding alternative co-op structure is an initial attempt to define the parameters of this issue and provide some preliminary impact analysis. A separate and more thorough analysis of the issue of co-op structure (and potential alternative structures) is provided in Appendix IV. Additional analyses are being prepared for Council review in April 2000. At that time the Council may take action to alter the co-op structure rules for 2001 and beyond.

12.2.11 Evaluation of Sideboard measures as Approved by the Council

12.2.11.1 Objectives of the Sideboards

The AFA mandates establishment of sideboard provisions to protect non-BSAI-pollock harvesters and processors from the potential impacts resulting from the AFA allocations of BSAI pollock and the ability to create pollock fishery co-ops. In certain cases the AFA was very explicit regarding the nature of the sideboard provisions, but in general left a great deal of latitude to the Council in defining the specifics of these measures. As such the list of alternatives and options analyzed in Chapters 6, 7, and 8 represent a combination of Congressional intent and Council creativity in carrying out Congress' intent. The basic purpose of the proposed measures is to maintain the 'status quo' - i.e., to maintain essentially the current distribution of groundfish and crab catch (and processing) among competing user groups. More specifically, the intent of the measures is to prevent AFA pollock participants from increasing their share of the harvest and processing of non-pollock species under Council jurisdiction.

12.2.11.2 Number and Description of Small Entities Affected

The number of entities affected by the sideboard provisions is not one and the same as the number of entities affected by the co-op structure analyzed in previous sections of this chapter. While section 12.2.8 described affected entities, an additional discussion is provided here to specifically address the entities which would be directly and indirectly impacted by the sideboard restrictions in non-pollock fisheries.

Directly affected vessels, plants, and companies

The entities directly affected by the sideboard limits are a very well defined group as defined by the AFA. Harvesters and processors eligible for the BSAI pollock fisheries, and which may form pollock cooperatives, are either named specifically in the AFA or qualify by meeting specific criteria in the AFA. The Act specifies by name 20 catcher processors (offshore sector), owned by nine different companies, that are eligible to continue participating in the pollock fisheries. The Act further specifies three motherships which are eligible to process the mothership allocation under the Act, and lists 19 catcher vessels which are eligible to fish and deliver that sector's allocation (2 others not specified are eligible through landings history).

For the inshore sector, the Act does not list the eligible plants and catcher vessels by name; rather, it stipulates the landing/processing history necessary for eligibility. For catcher vessels that is >250 mt delivered onshore in 1996, or 1997, or 1998 through September 1, or >40 mt for vessels under 60'. We estimate there are 113 catcher vessels eligible in the mothership and inshore categories (92 for inshore delivery, 7 for mothership delivery, and 14 which qualify for both), and an additional 7 vessels which deliver to the offshore sector. A shoreside processor must have processed >2,000 metric tons in both 1996 and 1997 to be eligible, except that processors who did less than 2,000 mt in both 1996 and 1997 would also be eligible, but restricted from

processing more than 2,000 mt in any future year under the Act. We estimate that eight plants, owned by 7 companies fall under these definitions.

Based on information from section 12.2.8, as well as from information contained in Amendments 51/51 (the inshore/offshore 3 analysis) it appears that the only directly affected entities which would be classified as 'small entities' would be a subset of the 113 catcher vessels described above. Essentially this would be the approximately 50 catcher vessels that are predominately independently owned, as described earlier. The remaining entities, including catcher/processors, motherships, shore plants, and catcher vessels owned by larger companies would exceed the criteria for defining small entities.

Indirectly impacted entities

Depending on the specific sideboard alternatives chosen, a number of small, coastal communities in Alaska could be impacted by the proposed actions - section 12.2.8 identified 3 specific communities. Sideboard limitations may indirectly impact coastal communities in which vessels are homeported, or to which they deliver fish for processing, and could be either positive or negative depending on the specific alternatives chosen. Up to 60 communities appear to meet the definition of small entity for purpose of the IRFA.

Indirectly impacted entities are a consideration relative to the proposed action(s), since it is these vessels that the sideboard measures are intended to protect. These are vessels which participate in fisheries other than BSAI pollock and would be expected to benefit from the proposed sideboard measures, to the extent the sideboard measures are restrictive to the approximately 50 AFA vessels classified as small entities. Or, to the extent less restrictive sideboard measures approved, these vessels would be 'negatively impacted', relative to more restrictive sideboard measures. Essentially, sideboard measures were intended to protect the non-AFA vessels, many of which are small entities - the nature of those sideboard measures represents a tradeoff between AFA and non-AFA vessels. Taking BSAI and GOA groundfish and crab fisheries into account, there are as many as 1,300 additional catcher vessels which would likely qualify as small entities and which would be indirectly impacted (protected to varying degrees) by the proposed measures. This includes both fixed gear and trawl fishing vessels, ranging from 30' to over 100' in length, many of which are independently owned and operated.

12.2.11.3 Impacts of Approved Sideboard Measures

While the sideboards are generally designed to preserve the status quo distribution of harvest in the fisheries, the Council considered and analyzed a wide range of alternatives and options to effect such sideboards. These are listed in Chapter 1, detailed and analyzed in Chapters 4 through 8, and are summarized in Chapter 11 which describes the Council's final Preferred Alternative. The scope and nature of the proposed sideboard measures is intended to maintain status quo catch and processing distributions of groundfish and crab between AFA and non-AFA operations. The small entities directly affected (limited) by the proposed actions would likely be better off without sideboard restrictions in non-pollock fisheries, but the Act does not allow for that alternative (indeed the sideboards are legislated and 'mitigation' of the effects of these sideboards would counter the very intent of the Act). On average, these entities should be no worse off with the sideboard limits, assuming that they are structured to allow catch up to the amounts previously enjoyed. Among the proposed sideboard alternatives and options there are certainly some that are more restrictive than others, and some of those could be expected to create significant impacts relative to other options which could be chosen. For example, the use of landed catch only (as opposed to total catch) will generally reduce the amount of the sideboard limit for each species, although for catcher vessels (the only small entities involved) this reduction is not as significant as for

the catcher/processor sector. Reductions in the level of the sideboard limit for AFA vessels will be offset, as small entities in the non-AFA sector will realize that amount of gain in the amount of harvest available to them.

As another example, in the case of sideboards to limit catcher vessels activity in crab fisheries there are options which range from limiting those vessels to their past catch history, to denying them access to certain crab fisheries altogether. In this case, the differences among the options are very significant, and in fact could impact some catcher vessels disproportionately. For catcher vessels which are AFA-qualified, but rely to a great extent on fisheries other than BSAI pollock, restricting the overall catcher vessel sector to an aggregate historical limit will disproportionately burden those operators, who would now have to compete with other vessels for a relatively smaller quota apportionment. In the case of AFA vessels which have significant reliance on crab fisheries, losing their ability to fish crab at all would be expected to have a significant, negative impact, based on current definitions of significance related to gross revenue losses (and a substantial number of these vessels would be classified as small entities).

More restrictive sideboard measures will generally create greater impacts to the directly affected entities (AFA vessels), which would be offset by greater benefits to the indirectly affected entities (the non-AFA vessels being protected). The proposed measures themselves are designed to protect one group of small entities from the impacts of a separate Congressional action - the Act itself. Within the suite of alternative sideboard measures there are a range of potential impacts to the directly affected small entities. In its deliberations, the Council recognized that certain choices from among those alternatives would serve to reduce impacts to those small entities relative to other options available.

12.2.11.4 Measures to Mitigate Impacts of Sideboard Measures

Examples of decision areas which could result in significant impacts were summarized above. The Council's final Preferred Alternative generally serves to maintain the status quo and keep in place the current catch distributions between AFA and non-AFA vessels. For catcher vessels in the groundfish fisheries the Council's Preferred Alternative generally uses their aggregate proportion of catch from 1995 through 1997 as the basis for their allowable catch in future years, under the AFA. In order to mitigate unintended impacts to certain participants in these fisheries, the Council included an exemption to the basic sideboard limit - that is, AFA vessels with less than 1,700 mt of BSAI pollock catch, and threshold landings of non-pollock species, are exempted from the sideboard limit, and will be allowed to continue unrestricted in the other fisheries in which they are engaged (subject to overall quota and PSC closures). The group of vessels most impacted by this exemption are those which historically focused their efforts in the cod fisheries, but did enough pollock to qualify under the AFA. Without the exemption these vessels would have been disproportionately and negatively impacted by the sideboard limits. As structured they will be able to enjoy the benefits of the pollock fishery co-ops as well as continue their unrestricted involvement in other fisheries.

In general the Council enacted similar restrictions for the crab fisheries, with some important differences which further restrict the AFA vessels' participation, but which also include some mitigating measures for small entities in that sector. For Bristol Bay Red King Crab (BBRKC), the Council's Preferred Alternative restricts the AFA eligible vessels to an aggregate amount based on historical participation, much as with groundfish. However, the Council included a wider range of years to define that participation (1991 through 1997 as opposed to only 1995 through 1997) which included years of larger harvest by those vessels, and which therefore increased the level of their sideboard limit (from about 9% up to nearly 13% of the available quota).

As with the example given in groundfish, there were some AFA vessels which actually had the majority of their income from fisheries other than pollock - specifically there were three AFA vessels identified in the analyses

which had significant and long-term participation in the opilio crab fisheries. Subjecting these vessels to an aggregate sideboard limit (shared with the other AFA vessels) would have resulted in disproportionate and negative impacts to those vessels - essentially they would lose their ability to continue their historical fishing practices. To mitigate this issue, the Council chose a compromise which generally restricted AFA vessels' participation in opilio, but allowed those with a high dependence to continue. Specifically the Council Preferred Alternative only allows AFA vessels to fish opilio if they fished opilio in at least four years between 1988 and 1997; however, if they do qualify they may fish unrestricted along with other crab vessels. The result of that action is that 5 of the 39 potential 'crossover' vessels (mostly small entities) will be allowed to continue in the opilio fishery.

12.2.12 Vessels excluded from the pollock fisheries

Through analysis of the eligibility requirements, combined with testimony to the Council from affected individuals, it has become apparent that at least two (possibly three) vessels with history in the BSAI pollock fisheries have been excluded from future participation in that fishery by the eligibility requirements contained in the AFA. While these vessels have historical participation, they did not participate in the recent (1996/1997) period required by the Act. While these vessels do not comprise a 'substantial number' of small entities (relative to the total which qualify under the more general license limitation or to the total number of AFA-eligible vessels), the exclusion could be expected to have a significant, negative impact on their operations, to the extent that pollock fishing in the BSAI historically contributed a large portion of their total fisheries income.

12.2.12.1 Measures to Mitigate Impacts of this Exclusion

The list of eligible vessels is one of the two sections of the AFA that the Council cannot alter. The exclusion of the vessels mentioned above, while of concern to the Council, is not an issue for which the Council can evaluate or consider mitigating alternatives. Only Congress, through amendment to the AFA, could effect such a change. Therefore, the exclusion is not being analyzed as part of the Council's decision; rather it is being mentioned as part of an overall package, comprised of both Council actions and Congressional mandates, which will be implemented through a regulatory package being promulgated by NMFS. A potentially compensating factor is that they will not be subject to sideboard restrictions in other fisheries, and can therefore attempt to make up lost revenues by increasing participation in other fisheries. Other mitigating alternatives are beyond the purview of the Council.

12.2.13 Recordkeeping and reporting requirements (RRR)

Additional recordkeeping and reporting requirements would be expected as a result of the creation of several inshore cooperatives that each independently utilize its own unique quantity of pollock catch as an aggregate of the individual allocation of its member catcher vessels. The new recordkeeping and reporting requirements would be required to be submitted to NMFS by the fishery cooperative management, not by each individual catcher vessel operating as a cooperative member. Therefore, this additional recordkeeping and reporting requirement would not adversely impact small entities. Inshore AFA cooperatives would not qualify as small entities as defined by the Small Business Administration.

The proposed sideboard measures are not expected to require additional recordkeeping or reporting for the small entities identified; rather, the burden of accounting for the sideboard limits will fall to NMFS. Participation in pollock co-ops may necessitate additional paperwork burdens for these entities within the structure of the co-op agreements in terms of catch and bycatch allocations and accounting for those allocations; however, such participation would be voluntary and is outside the scope of the sideboard

provisions. Processor sideboard provisions, depending on the level at which they are implemented, could entail additional recordkeeping and reporting for those processors, but they are not defined as small entities for purposes of the IRFA, nor have decisions been made yet with regard to processor sideboards.

12.2.14 Relevant Federal Rules

This action is authorized by the AFA in conjunction with the Magnuson-Stevens Fisheries Conservation and Management Act as amended in 1996.

12.2.15 Summary and Conclusions

12.2.15.1 Co-op structure

Independent catcher vessel operators participating in the inshore component of the BSAI directed pollock fishery will be affected, both positively and negatively, by the establishment of AFA fishery cooperatives. However, as currently designed, independent catcher vessels could be expected overall to be worse off under the AFA cooperative structure than compared with their experience under the open-access fishery of recent years. The primary benefit to catcher vessel participation as an AFA inshore co-op member is that the vessel owner receives some assurance for the option of catching a specific amount of pollock equal to the vessel's catch history as determined by NMFS. The primary disadvantage is that this allocation may not be optimized for its economic value given the absence of a competitive ex-vessel market with more than one potential buyer. Furthermore, the potential catch would likely be reduced for independent catcher vessels that do not join an AFA cooperative.

No catch allocation is granted to catcher vessels whose owners choose not to participate in an AFA co-op. Therefore, they must operate in the open access fishery that will, in all probability, be composed of a smaller "pool" of allowable catch. This reduction in allowable catch in the open access pollock fishery will occur in the amount equal to the reserved catch allocations granted by NMFS to catcher vessel operations that do choose to join an AFA co-op. As a result, non-cooperative catcher vessels with smaller catch capacities may be disadvantaged in the open-access fishery. This condition could be exacerbated in the event that catcher vessels with small catch histories, but with large per-trip harvest capacity, choose not to join a co-op and intentionally target pollock in the open-access harvest "pool". Given the predicably shorter open-access fishery resulting from a reduced available catch, the smaller the per-trip harvest capacity of an inshore independent catcher vessel, the less successful its operation would be in the open access fishery created under the AFA.

Given their expected annual gross revenues of less than $3 million, many operators in the fishery impacted by the proposed action are small entities. For many of the catcher vessels operating in the inshore component of the directed pollock fishery, it may be assumed that these entities are independently owned and operated. In addition, there are numerous catcher vessels in this fishery that, to some degree or another, are a blend of being partially-owned or fully-owned by shore-side processors. However, the ownership characteristics of catcher vessels operating in the fishery has not been thoroughly analyzed to determine what degree, if any, they are affiliated with a larger parent company. Furthermore, because NMFS cannot quantify the exact number of small entities that may be indirectly affected by this action, or quantify the magnitude of those effects, NMFS cannot make a finding of non-significance under the RFA, with regard to issues of inshore co-op structures.

12.2.15.2 Sideboard measures

Sideboard limits are established to limit the amount of non-BSAI pollock which can be harvested by AFA-eligible vessels. Generally these limits freeze in place the current distribution of catch between AFA and non-AFA vessels. More restrictive sideboard options considered would negatively impact the small entities involved in the AFA fleet, relative to other options, though it is uncertain whether such differences would be significant. More lenient sideboard options would generally benefit the AFA fleet, though it would be at some expense to the remaining (non-AFA) fleet, many of whom are also small entities. In essence, the degree of sideboard limits represents a trade-off in impacts to two sectors of small entities, as is the case with most allocation-based management actions.

While the differences in sideboard options likely are not significant, particularly given the mitigating measures included, they do affect a substantial number of small entities. In combination with the co-op structure issues described in this section, it is impossible to make a finding of non-significance with regard to the collective actions in this amendment package

12.3 Section 303(a)(9) -Fisheries Impact Statement

This section of the Magnuson-Stevens Act requires that any management measure submitted by the Council take into account potential impacts on the participants in the fisheries, as well as participants in adjacent fisheries. Chapters 6, 7, 8, and 11 detailed the expected impacts of the alternatives on the participants (AFA eligible vessels and conversely, the non-AFA vessels). The AFA established the pollock limited harvesting and processing entities, the allocations among the sectors, and the provisions for development of cooperatives. The AFA also established provisions for the development of sideboards, which are in fact designed to address impacts to other fisheries participants, and the focus of this amendment package is on these very sideboards; i.e., the whole scope of the proposed measures is to mitigate impacts on other fisheries which may arise as a result of the Act itself. The very nature of the sideboards is to preserve the status quo, thereby minimizing the impacts of the Act and fishery cooperatives on the non-AFA fleets. The development of these sideboard measures, based on the analyses in the preceding chapters, is not expected to have significant impacts on other fisheries, other than to protect their share of various fisheries resources. Basing the sideboard provisions on landed catch will increase the protection afforded to other fleets. Management of these caps should allow the AFA fleet to still conduct directed fisheries for species which they targeted during the years 1995-97, though perhaps at somewhat reduced levels.

12.4 Section 303(b)(6) - Limited Entry Considerations

The AFA prescribed a limited entry program for the BSAI pollock harvest and processing sectors by naming the specific catcher processors, catcher vessels, motherships, and shoreside processors which are eligible. Nothing in this proposed amendment package addresses or attempts to revise that prescribed set of players. The sideboard measures are intended to limit harvest and processing by the AFA-eligible participants in non-pollock fisheries, and with the exception of alternatives in the crab sideboards, do not propose to further limit entry in these fisheries. The notable exception is contained within certain alternatives which would prohibit AFA vessels from continuing to fish in certain crab fisheries, where they are otherwise qualified under the Council's license limitation program (LLP).

In October of 1998 the Council revised its crab LLP by imposing additional recent participation requirements (had to have fished in 1996, 1997, or 1998 in addition to the original requirements). This action reduced the overall crab fleet from 365 to approximately 297 vessels. Of the remaining 297 vessels approximately 40 of

those are also AFA-eligible and are limited, for certain species/area endorsements, from future participation in the crab fisheries. In some crab fisheries they are also limited to their historic portion of the crab GHL. The Bristol Bay red king crab fishery and opilio fisheries are good examples. In the BBRKC fishery, AFA vessels must be LLP qualified to fish. They will then be capped at their average landings history for the five years the fishery was open from 1991-97. The opilio fishery was treated differently. A vessel must have had landings in the opilio fishery in at least four years from 1988-97 to be allowed to participate in this fishery under the AFA sideboards. This action reduced the number of vessels eligible to participate in the fishery by about 35 when compared to the LLP program. In bairdi, no fishing will be allowed unless and until the biomass is rebuilt.

A separate analysis was prepared which will be incorporated as part of the overall AFA amendment package. That analysis, prepared by Dr. Scott Matulich of Washington State University under contract to the Council, examined the issue of relative dependence on the crab fisheries of all participants, including the AFA vessels which could be most directly impacted. That analysis is included as Appendix III to this document.

12.5 National Standards

The following National Standards contained within the Magnuson-Stevens Act are addressed, where relevant to the actions taken by the Council under this amendment package. Most of these standards would not be affected by the proposed sideboard provisions - while fundamental in-season management changes are implied by some of the alternatives, they do not change the overall management structure relative to the National Standards.

National Standard 1 - Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery. The Council's preferred alternative would not impact National Standard 1.

National Standard 2 - Conservation and management measures shall be based upon the best scientific information available. Information contained in this amendment package was derived from the best sources of information available to Council and NMFS Staff.

National Standard 3 - To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination. Nothing within this amendment package will impact how NMFS and ADF&G manage fish stocks in relation to National Standard 3.

National Standard 4 - Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be (A) fair and equitable to all such fishermen, (B) reasonably calculated to promote conservation, and (C) carried out in such a manner that no particular, individual, corporation, or other entity acquires an excessive share of such privileges

Specific limited entry and allocative measures were prescribed by the AFA, but those are not the focus of this amendment package. Allocation of pollock and associated groundfish among the co-ops will be required by NMFS, but that is also fairly prescribed by the Act. Within the possible sideboard measures there are alternatives which will impact the distribution of the groundfish sideboard allowances among sector or co-ops, although such sideboards are generally prescribed by the Act. The Act also contains provisions to limit shares of harvest and processing, though again those measures are not included in this amendment package. One

aspect of the sideboard which could further limit entry are options which would preclude AFA catcher vessels from further participation in certain BSAI crab fisheries. This exclusion is based on AFA, LLP, and participation history in the crab fisheries, not on any criteria of state residency.

National Standard 5 - Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose. The Council's preferred alternatives provided protections for non-AFA fishing fleets as mandated by the AFA. Within that system, efficient operations (both AFA and non-AFA) should continue to compete for the non-AFA species.

National Standard 6 - Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

The passage of the AFA precludes most of the fishing fleet from future participation in the BSAI pollock fisheries. Conversely, the sideboard provisions developed by the Council are designed to limit the AFA vessels and processors in terms of what they can do in the non-pollock fisheries. The combined effect of these actions will be to lock in place the relative catch distributions by sector and species. Relative to the status quo fisheries, this will decrease the flexibility to enter and exit fisheries and decrease the ability to respond to variations and contingencies among fisheries, such as quota changes, price changes, and market fluctuations.

National Standard 7 - Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

Primary costs associated with the proposed measures (other than opportunity costs discussed above) will fall on the NMFS as additional implementation, monitoring, and enforcement requirements are created. Depending on the level at which sideboard limits are applied, these additional costs to the agency could be significant. Chapter 9 addresses these issues in some detail.

National Standard 8 - Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse impacts on such communities.

While none of the proposed actions directly involve community level issues, some of the sideboard provisions could indirectly affect coastal communities to the extent that the vessels directly affected are homeported or deliver catch to those communities for processing. No attempt has been made to quantify those impacts as they are generally expected to be along the lines of status quo - i.e., the provisions are designed to maintain the current distributions of catch by species among the various fisheries participants.

National Standard 9 - Conservation and management measures shall, to the extent practicable, (A) minimize bycatch, and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

Sideboard caps were calculated based on landed catch history of the AFA fleet. The Council selected this option because they did not wish to give catch history credit for discarded fish. The extent to which the discard rates of the fleets vary by species was provided in Chapter 11.

The Council may reduce the bycatch caps overall through the amendment process. One of the issues discussed in this analysis is the necessary bycatch associated with current fisheries, now that bottom trawling is banned for pollock. However, any savings in that area is likely to be small, since the pollock fisheries have historically accounted for a small portion of the crab and halibut bycatch.

National Standard 10 - Conservation and management measures shall, to the extent practicable, promote the safety of life at sea.

The preferred alternatives selected by the Council should not have any negative impacts on the safety of life at sea.

13.0 LIST OF PREPARERS

13.1 Primary Authors

Darrell Brannan, Chuck Hamel, and Chris Oliver
North Pacific Fishery Management Council

13.2 Other Contributors and Organizations Consulted

Jane DiCosimo, David Witherell and Gail Bendixen
North Pacific Fishery Management Council

Chapter 3
Tamra Faris
National Marine Fisheries Service, Alaska Region

Chapter 4
Jay Ginter
National Marine Fisheries Service, Alaska Region

Chapter 8
Marcus Hartley and Pat Burden
Northern Economics, Inc.

Chapters 9 and 10
Kent Lind, Sue Salveson, Galen Tromble, John Sproul, and other staff
National Marine Fisheries Service, Alaska Region

Numerous industry contacts were also made in the drafting of this document.